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ABSTRACT

Two federal educational programs are covered in this annual report for FY 1969: Title II of the Elementary and Secondary Education Act and Title III of the National Defense Education Act. The first report describes how the 50 states, the District of Columbia, Guam, Puerto Rico, the Trust Territory of the Pacific Islands, the Virgin Islands, and the Department of the Interior (operating schools for Indian children) utilized Title II funds for the improvement of educational quality and opportunity through increased school library resources, textbooks, and other instructional materials. Also covered are staffing patterns for the first three years of the program, special purpose grants, participation of private school children and teachers, program coordination, accessibility of loaned materials, management activity, school media personnel, staff development, selection of materials, standards for instructional materials, and program evaluation. The second report describes the use of Title III funds to strengthen instruction in science, mathematics, foreign languages, and the humanities and arts through the purchase of equipment and materials, minor remodeling, and through state supervisory and related services. Major topics include priorities, program coordination, adequacy of equipment and reimbursement, improved instructional patterns and teaching techniques, curriculum improvement, student achievement, and program evaluation. (JD)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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School Library Resources, Textbooks, and Other Instructional Materials
Title II, ESEA

Strengthening Instruction in Science, Mathematics, Foreign Languages, and the Humanities and Arts
Title III, NDEA

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other programs

School Library Resources, Textbooks, and Other Instructional Materials - Title II, ESEA

Strengthening Instruction in Science, Mathematics, Foreign Languages, and the Humanities and Arts - Title III, NDEA

Guidance, Counseling, Testing - Title V, Part A, NDEA

other programs

There are a dozen other Federal programs of aid to education which make funds available to State educational agencies for administrative costs. In the following pages are reports on three which, by their statutory terms, may be classified as "State plan-State grant" programs. They are:

1. Title II, Elementary and Secondary Education Act (ESEA)—School library resources, textbooks, and other instructional materials.
2. Title III, National Defense Education Act (NDEA)—Strengthening instruction in critical subjects and the arts and humanities (section 12 of the National Arts and Humanities Foundation Act has been absorbed into this).
3. Title V, Part A, NDEA—Counseling, guidance, and testing.

In the discussion of these programs, the emphasis will be on their intrinsic effects, to the limited extent to which these can at this stage be ascertained, but chiefly on their relation to the State departments of education.

School Library Resources, Textbooks, and Other Instructional Materials

(Elementary and Secondary Education Act of 1965, Title II)

One of the drawbacks, from the Federal point of view, of Federal administration of programs in aid of education is that the results that come back to Washington are generally expressed only or chiefly in terms of numbers of dollars spent, with generalized descriptions of what they have been spent for, and similarly useful (from an administrative point of view) but dull (from a human standpoint) information.

Title II of the Elementary and Secondary Education Act provides Federal grants "for the acquisition of school library resources, textbooks, and other printed and published materials for the use of children and teachers in public and private elementary and secondary schools."

If the U.S. Commissioner of Education and his staff who administer this program of grants learn that in an inner-city school which did not previously have a school library, out of 41 boys and girls interviewed, 33 reported that they went there because they "like to read," it is gratifying. But the Commissioner and his staff learn it because there has been a special study made: *Descriptive Case Studies of Nine Elementary School Media Centers in Three Inner Cities* (more information on this is given below) and not because the normal reporting procedure permits such indulgence. From that study, they also learn that 17 of the children "like to study there." Although seven of the children were in kindergarten, and seven in the first and second grades, 39 of the children reported they found books that they could read by themselves—and all of them wanted to.

It is too soon to tell whether this will have an appreciable impact on their ability to read, but by such evidence as is now available, the odds are extremely favorable.

In this report, we must necessarily focus our attention on the administration of Title II in relation to State departments of education, as the leaders of education in their States. The information for the report is taken from the annual reports submitted by the State education agencies.

The first year's appropriation for Title II was $100 million, and it remained around that figure until fiscal year 1969, when it was reduced to $50,000,000. State administrative expenses for the four years were respectively $2.36 million, $3.9 million, $4.04 million, and $3.035 million. The Senate Committee on Labor and Public Welfare in its report on proposed ESEA amendments for 1970 (S. Rept. 91-634, p. 25) wrote with respect to Title II that

> a number of States with low population and large rural areas, particularly in the West and New England were able, under Title II, to employ State school library and audiovisual supervisors for the first time. These States, just beginning the development of school media programs, are frequently those States where the percent of public elementary schools without centralized libraries is highest, as it is generally true on a statewide basis, that school libraries have reached a higher stage of development in those States that have had school library supervisors for a significant period of time.

During the first year, the State educational agencies hired 113 professional employees for the Title II program; the next year they took on 142; the third year, 152. Full data are not yet available for fiscal year 1969.

The history of State administration of Title II is one of relatively small outlays, with emphasis on counseling concerning informed and judicious acquisition of materials for use

in instructional programs. By law, the States are allowed to use up to five percent of their allotment, or $50,000, whichever is greater, for administration. Only a half-dozen States took their full entitlements last year.

(In addition to its annual reports on Title II, based on State reports, the U.S. Office of Education published in 1969 the results of two sets of ad hoc reviews of Title II programs which exemplify the effects achieved by the special purpose funds:

1. *Emphasis on Excellence in School Media Programs*, descriptive case studies of media programs in eight public schools—three elementary, three junior high, and two senior high schools—selected on the basis of criteria that might produce broad representative findings. This volume, OE-20123, may be obtained from the Superintendent of Documents, Washington, D.C. 20402, catalog No. FS 5.220:20123 ($1.75).
2. *Descriptive Case Studies of Nine Elementary School Media Centers in Three Inner Cities*, mentioned above. This, while copies are available, may be obtained from the U.S. Office of Education, Washington, D.C. 20202 (No. OE-30021).)

State Management of School Media Programs

Under ESEA Title II, the State plan serves as the basis for the operation of the program, describing management procedures to be followed in its administration. The staffing pattern and assignment of responsibilities; types of management activities such as planning; composition and duties of advisory committees; and the collection and dissemination of data, are outlined. The plan lays down the criteria for making materials available on the basis of the relative need of children and teachers for materials and also for the equitable distribution of materials for the use of private school children and teachers. It also provides for appropriate coordination of Title II with other Federal programs and sets forth the design for use of administrative funds by local educational agencies to make loaned materials accessible. The following sections illustrate types of management activity set forth in State plans for fiscal year 1969:

Staffing Patterns

State department of education personnel assigned to the administration and supervision of the Title II program have included full-time and part-time administrators, school media specialists, curriculum and subject specialists, fiscal and statistical personnel, and nonprofessional employees who do not fall into any of the other categories.

Table 5 provides data on the number of administrative, supervisory, clerical, and other positions assigned in State departments of education to administer the ESEA Title II programs in the first three fiscal years of the program. (These data are not yet available for fiscal year 1969.)

As a result of the reduction in funds available for the program in fiscal 1969 a number of changes were made in staffing patterns and assignment of responsibilities in the administration of Title II.

Some State agencies lost library and media professionals and were unable to replace them or reassign their responsibilities. *Maine*, for example, which employed a school library supervisor for the first time in fiscal 1966, is now without one again. In *Wyoming* the library specialist is serving half-time in Title II activity. In *Pennsylvania*, the Division of School Libraries lost two professionals; their responsibilities could not be reassigned because the rest of the staff was already carrying loads considered excessive.

Elsewhere, reshuffling was the prevailing pattern. *New Jersey* lost an audiovisual specialist, and library specialists assumed the responsibility for processing audiovisual applications to the best of their abilities. *Georgia*, *Kentucky*, and *Florida* each lost a consultant. Other States reported losses of one or more staff members. *Missouri* reported a 50 percent staff reduction; *Wisconsin*, 25 percent.

Table 5.—Number of State Department of Education Personnel Assigned to Elementary and Secondary Education Act, Title II Programs in Full-Time Equivalents, Fiscal Years 1966, 1967, and 1968

Type of Personnel	Number of Personnel		Full-time Equivalent of Col. 3	Total Full-time (Cols. 2 & 4)
	Full-time	Part-time		
1	2	3	4	5
Administrator				
Fiscal Year 1966	31	66	16.19	47.19
Fiscal Year 1967	48	48	13.96	59.96
Fiscal Year 1968	43	54	12.59	55.59
Supervisor				
Fiscal Year 1966	67	87	13.84	80.84
Fiscal Year 1967	85	129	24.43	109.43
Fiscal Year 1968	99	174	26.53	125.53
Secretarial and Clerical Staff				
Fiscal Year 1966	103	119	23.67	126.67
Fiscal Year 1967	158	150	34.08	192.08
Fiscal Year 1968	176	204	49.06	225.06
Other				
Fiscal Year 1966	17	90	12.59	29.59
Fiscal Year 1967	22	48	6.02	28.02
Fiscal Year 1968	27	95	23.08	50.08

Some States were able to absorb the cost of maintaining their library and media specialists by use of State funds. Others absorbed the library and audiovisual specialists into other units of the agency; whether they would continue to function with respect to school library programs was not clear. In these cases, the personnel were retained, but the programs may not have been. In still other cases, the program responsibilities were reassigned to personnel and units which had other primary responsibilities, so that the school library program became Cinderella-after-midnight. The *Minnesota* State Department of Education, in addition to making staff cuts, had to close down successful demonstration centers at Mankato and Brainerd.

Management of Acquisitions Program

School library resources, textbooks, and other instructional materials are made available under the Title II program to children and teachers in public and private elementary and secondary schools on the basis of relative need. This refers to the need of children and teachers for materials that may be acquired under Title II in comparison with the materials already available to them. State departments of education are asked from time to time to evaluate the criteria applied in deciding relative need and to adjust them to changing situations. Early in fiscal year 1969, a number of States revised relative need formulas to assure the provision of instructional materials of quality where the pinch was greatest. The reduction in available funds necessitated adjustments like the following:

Delaware reported curtailment of the special-purpose grant program; however, a portion of the funds available for administration was allocated to this program to offset a part of the reduction in funding.

In *New York*, children and teachers in 200 school districts with the greatest need for materials were selected to participate in the basic grant program in fiscal year 1969. Factors used to determine participation included critical racial imbalance problems, availability of existing quantities of school library resources, financial ability to acquire school library resources, and number of children and teachers to be served. Initial, basic collec-

tions of school library resources for the use of exceptional children were established in 15 agencies in the Special Education Instructional Materials Center (SEIMC) network.

Maine reported expansion of its "incentive grant" program to include more schools, but with reductions in funding. Even the small grants under the incentive program have resulted in genuine progress in the improvement of instructional programs, the State department feels.

The statement of the *Georgia* Title II coordinator that "materials purchased during fiscal year 1969 were of the highest quality of any year of the program" was representative of the feeling throughout the States. In order to simplify matters for the local systems and for the reduced clerical staff in the State Title II office, *Alabama* permitted systems to order material without prior approval of the Title II consultant. *Puerto Rico* continued to reduce its proportion of funds spent for textbooks, with top priority going for the first time to school library resources. Puerto Rico is still alone in spending a sizable share of its Title II funds for textbooks (33 percent).

Special Purpose Grants

No new special purpose grant projects were funded, but *North Carolina* and *Florida* made supplemental allotments to continue projects previously funded. *Georgia* withheld funds from localities that failed to maintain effort.

Most States list the adoption of the central media concept as a major strength in making materials available, as well as the allocation of funds on the basis of greatest need. Locally, concentration of effort on areas of weakness has added emphasis to the "needs" aspect of the program. *West Virginia* added an incentive factor to its funding formula, providing a small bonus to a school establishing a building resource center at the elementary level.

In the *District of Columbia* audiovisual materials purchased with Title II funds are now placed in individual school media centers. (Regular budget purchases of audiovisual materials are put in the central library for the system.)

South Dakota limited acquisitions to school library resources, *Minnesota* to schools with a high concentration of Indian children, and *Kansas* to elementary schools, with secondary schools receiving some special grant funds; *Nebraska* and *Ohio* suspended special purpose grants; *Wisconsin* increased special purpose grants to assist schools with greatest need for materials; *Illinois* adjusted its relative need formula to increase assistance to more economically deprived and to assist in developing cooperatives between school districts; *North Dakota* removed percentage categorical restrictions to allow utilization of funds for greatest need at local level.

The reduction of funds in *Montana* resulted in a change in the acquisition program, which nevertheless allowed every school an allocation.

With the packaging of Federal funds in *Texas* an adjustment was necessary in the management of the acquisition program to make the best use of Title II funds. The Texas annual report states that among the consolidated program goals are:

- Focus of local program planning upon the student. The major aim is to encourage definition of programs on the basis of activities and services delivered rather than upon the basis of revenue sources or upon the administrative structure of the Texas Agency.
- Design of a comprehensive educational program in each local educational agency that would meet the educational goals and intent established by Congress, the State Legislature, and the local community in a way that produces maximum benefits for dollars expended.
- Development of a consolidated application procedure, as well as consolidated evaluation and reporting procedures, that would permit the local superintendent and his staff to plan systematically several program elements that had in the past been planned independently, thus permitting maximum reinforcement of

any one program element by other related program elements.

The absence of a required list of eligible materials is one of the greatest strengths of the Title II program in *Idaho*. Personnel in the local educational agencies are free to select those instructional materials needed most to enhance their curriculum, to work with committees of local people, and to try to fulfill their greatest needs.

Because the *Arizona* Title II program was staffed by one professional, it became necessary to relieve her of some responsibilities. Classified personnel were therefore assigned the initial screening for eligibility of purchase orders. Changes were made in distribution to concentrate materials where relative need was greatest. Arizona declared ineligible to participate during the fiscal year all schools with holdings of materials above 90 percent of the recommended numbers, and *Nevada* suspended its special purpose grants and curtailed State administrative expenses in order to make 95 percent of its allotment available for acquisitions.

For the first time, *Washington* accepted cooperative projects submitted as a single project application by two or more school districts. This permitted them to pool their funds to concentrate on specialized materials in a subject area or for particular groups of children. Also, Washington for the first time implemented its special purpose grant program. Projects were funded for children and teachers with special needs:

Five on intercultural education (the Pacific Coast and its relationship to the Pacific Rim, Africa, Negro history, the suburban district and its relation to and responsibility for urban problems);

One for handicapped children;

One for culturally disadvantaged children (expanding political and social experiences and sources of information for students in remote rural areas);

One for educationally and culturally deprived children (a Taba*-based program on Northwest history for elementary-age Indian children).

The SEA also encouraged districts to develop special purpose grants that would promote effective introduction to new media, and made three such grants: a project devoted to careful selection, evaluation, and exemplary use of 8mm. films in an elementary urban school, grades 3–6; an 11th-grade American history project using original source materials on microfilm, which also has as one of its objectives research into the problem of periodical storage; and an art education program (K-12) involving the extensive use of art prints. The basic purpose of the special purpose grants was to promote effective, innovative programs utilizing a wide variety of media. Examples of those funded in fiscal year 1969 are a social studies project in a model school resource center which is located in the middle of a team teaching area for which the entire staff has been trained in both Taba and inquiry techniques; an ecology and environmental education project concentrated on a specific geographic area for which few materials were available (an outdoor education site comprising five life zones has been developed cooperatively by three separate government agencies as a result of this project); and the interrelationship of the study of science fiction and a reading program at the high school and 5th-grade levels.

Hawaii made adjustments in its acquisitions programs to provide a more efficient method of handling resources bought with Title II funds and allowing more of the Federal money to be used for acquisitions. Title II book orders and processing were coordinated with previously arranged schedules through the State Centralized Processing Center. Title II filmstrips and periodicals were ordered and processed through the State office for Title II.

Participation of Private School Children and Teachers

Children and teachers in both public and private elementary and secondary schools are

* Taba = an instructional technique named for its originator.

eligible participants under ESEA Title II. The same criteria prevail for determining relative need. The major strength in the program for private school children and teachers was the lack of discrimination between public and private school participants and in representation on State advisory committees. Involvement of private school personnel in meetings at State, regional, and local level, and assistance given in needs assessments and selection of materials also strengthened the private school factor of the program.

Some exemplary excerpts from State reports on nonpublic school participation follow:

Connecticut reported a highly favorable reaction to the Title II program from private school officials, citing their tremendous need for instructional materials for use in private school programs.

New York reported excellent cooperation among public and private school officials in planning the development of Title II projects. Private school representatives participate in selection of materials but State and local public education agencies have the final responsibility for selection.

Pennsylvania noted that the new libraries in private schools often established and administered by volunteer parent groups under professional supervision are strong testimony to the interest of the parents, and appreciation by the children who have had the use of Title II materials.

Alabama amended its State plan so that loans to private schools are now handled directly through the State Department of Education. Shortcomings in benefits to children and teachers in private schools were attributed to lack of funds and personnel.

Puerto Rico is doing a follow-up study of purchase orders in an effort to improve its handling of the private school program.

Missouri: Visits to schools showed an improvement in the working relationships between public and private schools.

Minnesota report said that the large quantities of carefully selected materials made available to public and nonpublic school children have vastly increased the dissemination of quality information for boys and girls of Minnesota.

Utah: Children and teachers in the private schools have equal access to Title II materials. Each district determines the loan period to public and private school children and teachers for Title II materials. The cooperation between the public and private school personnel has been excellent.

Montana also comments on the remarkable relationship between the public and private school personnel. For example, one school district that did not itself participate in the Title II program administered the program for a parochial school in the district.

Arkansas: Children and teachers in private schools share the same benefits as children and teachers in public schools. Among these benefits:

(1) Teachers have the opportunity to recommend instructional materials for purchase;
(2) All books purchased are listed in one or more of the recommended selection aids;
(3) All library resources are the property of the entire district and not of any one school within the district.

California: Special workshops were held for private school personnel in the Los Angeles area on cataloging non-book materials; librarians, administrators, and teachers from private schools participated in other training sessions.

Several private schools in the *Trust Territory of the Pacific Islands* have since the advent of Title II been able to gear their instructional programs more closely to that of the public schools through use of materials made available under Title II. The program has thus worked as a unifying force.

Weaknesses observed in the program for private school children and teachers included:

- Difficulties in getting complete and reliable information from the schools to use as a base in calculating relative need (*Nevada*);
- Inadequacy of the funds available to reimburse certain LEAs having a dispro-

portionate ratio of private to public schools for administrative functions they performed (*California*);

- The frequent change of administrative personnel in the private schools, requiring a continuing program of orientation on the Title II program (*California*);
- The necessity, because of time limitations, for the Title II Administrator to substitute alternate titles (*Arizona*).

Coordination

To achieve maximum educational benefits, the ESEA Title II program continued to be coordinated in fiscal year 1969 with other titles of ESEA, as well as a number of other programs of Federal financial assistance.

As in previous years, the most extensive such coordination involved programs funded under ESEA Title I and NDEA Title III. (ESEA Title I supplies assistance to districts with larger numbers of educationally—because economically—disadvantaged children. NDEA Title III provides funds for strengthening instruction in critical subjects.) Many new media centers in elementary schools serving disadvantaged children have been established using funds under ESEA Title I and II programs. Title I funds are used to obtain media facilities, professional and clerical media personnel, and media center equipment and supplies which are not eligible under ESEA Title II. Title II funds are utilized to buy such library materials as books and audiovisual materials.

Coordination of the Title II program with other Federal assistance programs is often accomplished routinely at the State level in most States by cooperative review of media-related projects in all programs.

Some examples of Title I and Title II coordination:

- A Title I kindergarten program in Milford, *Delaware*, has been developed to emphasize language arts experiences. Instructional materials were provided under ESEA Title II.
- Titles I and II were coordinated to provide a library program to support remedial reading, mathematics, and speech programs for neglected and delinquent boys assigned to the Residential Treatment Unit, *Massachusetts* Youth Service, Oakdale.

Coordination of NDEA Title III and ESEA Title II was reported at both State and local levels. Media and subject specialists employed in State departments of education with NDEA Title III funds on a matching basis frequently gave consultative assistance in the selection, organization, and use of instructional materials acquired under Title II. Equipment acquired under NDEA Title III often used audiovisual materials bought with Title II money.

Other examples of the coordination of ESEA Title II programs with other programs of Federal financial assistance include:

- Several States—*New Jersey, Pennsylvania, Rhode Island*—have indicated that representatives from the Library Services and Construction Act (LSCA) staff serve on Title II advisory committees, and vice versa. Other forms of coordination include cooperative planning by local school and public library administrators concerning library services to students in the same geographic area, and cooperative planning in selection of materials, inservice education, processing, interlibrary loans, and the like.
- *Pennsylvania* reports publication of *Guide for School Librarians* supported by ESEA Title V funds and cooperating school districts.
- Conducted under ESEA Title V, a New England research project on reading provides interesting data on school media programs. *Rhode Island* leads in provision of school media centers, provision of full-time staff, and number of library books, also offering greater accessibility and more instruction in study skills.
- The *Alabama* Learning Center, funded since 1967 jointly under ESEA Titles I,

II, and III, continues to function under the supervision of the professional personnel of the Title II staff. Arrangements have been made to make this project a focal point of the 1970 annual convention of the American Library Association.

- In the *District of Columbia* the newly created Department of Federal Programs has been assigned this function as one of its prime responsibilities.
- In *Maryland*, LSCA Title III funds have been used to help finance a joint project of public and school libraries to develop bibliographies to accompany teacher guides for the new State instructional programs; Title II has contributed State staff time to this program.
- In *Mississippi* a representative of the State Library Commission serves on the State Advisory Committee for Title II ESEA while members of the Library Services Staff serve on the Advisory Committee for Titles III and IV-A of LSCA.
- *West Virginia*, by planning cooperatively with Titles I and III of ESEA and Title III of NDEA and regional and local levels, was able to open one of the first comprehensive elementary media centers in the State.
- *Iowa* ESEA II area centers received ESEA Title V basic grant funds for conducting a media seminar for teaching in the area.
- *Minnesota* reported that its Incentive Grant funds from Title II went to schools with high concentrations of Indians, and librarians and library aides from these schools participated in a Library Services Institute for Minnesota Indians.
- *Kansas* ESEA Title II and LSCA Title III cooperated to tie four large high schools and a public library (county) into the State information circuit.
- In *Texas* the scope of program consolidation includes program elements funded under ESEA Titles I and II, and NDEA Titles III and V-A, Vocational Education, and by State funds. ESEA Title V grants (to strengthen SDEs) supported reorganization of the Texas State Agency according to function. ESEA Title III established 20 regional education service centers, each with a media component, which circulate media material and offer consultative and information services in a specific geographic area.
- Most of the elementary school libraries in *Arkansas* were organized as a result of coordination of ESEA Titles I and II funds. Title II provided library resources designated as needs in the innovative instructional plans to enhance the Title III program. Special education teachers requested and received library materials purchased under Title II for children in the Title VI program (education of handicapped children). Almost all schools are now coordinating ESEA Title II with NDEA Title III by acquiring materials (Title II) to use with equipment purchased with Title III funds.
- *Guam* reported that materials bought with Title II funds have strengthened programs under ESEA Titles I, III, and VI, in addition to providing materials for use with equipment acquired with NDEA Title III funds. The Title II Coordinator works with the ESEA Title III staff to strengthen the services of the Learning Resources Center, a primary function of which is to acquire and circulate instructional materials and related equipment. Selection tools acquired under NDEA Title III form a part of the collection. The Center also conducts some inservice training of librarians and media coordinators, and provides consultative services on the selection and use of learning materials to teachers, librarians, and administrators who come to the Center.
- In the U.S. Bureau of Indian Affairs (which conducts Indian schools) and the *Nevada* SEA, administration of various Federal programs was centralized, thus

providing opportunities for better coordination.

- Coordination of the Title II program with other programs of Federal assistance was accomplished in *Oregon* in the following ways:

  The administration of the Title II program is combined with that of Title III NDEA;

  All Title I and III ESEA projects that contain areas relevant to Title II ESEA and Title III NDEA are submitted to the pertinent staffs for evaluation and comment;

  The Title II Consultant for Library Resources is a member of the State Committee for Interlibrary Cooperation and LSCA and is thus able to assist in coordinating activities that come before the group;

  The general and special subject matter consultants advise the schools on how they may use the various Federal assistance programs to complement each other in meeting their needs for the improvement of instruction through the addition of personnel, facilities, equipment, and materials;

- The coordination of Title II with other ESEA titles in the *Trust Territory of the Pacific Islands* can be best illustrated through the science and mathematics workshops which were held during the year under the auspices the ESEA Title V. A major objective of the sessions was to reach agreement on the types of materials that were to be purchased with Title II funds. For the science workshop a bibliography produced under LSCA Title III was provided, and LSCA bookmobiles circulate some of the materials bought with Title II money to children and teachers in public and private schools in three of the school districts.
- In order to simplify administrative procedures, responsibilities for Federal programs in the *Washington* State education agency were reorganized in October 1968 to integrate Federal and State programs and at the same time maintain program integrity. A Federal Programs Operations Committee (FPOC) was established, drawing from the several divisions for its members: Administrator of Title II Programs, Coordinator of Federal Programs, Federal Budget Administrator, Research-Evaluator for Federal Projects, member from Division for Teacher Education and Certification. FPOC is responsible to the superintendent and his Cabinet for:

  Recommending policies and programs related to Federal projects which are consistent with the needs of the schools of the State and the State Office of the Superintendent of Public Instruction;

  Establishing, maintaining, and coordinating operational procedures related to Federal programs.

A Federal Liaison Officer was appointed to serve not only as chairman of the FPOC, but as liaison between the State education agency and the U.S. Office of Education. He relays to the State Superintendent and his staff all pertinent and up-to-date information about Federal programs.

A new position of Federal Budget Administrator was established to handle all fiscal matters relating to Federal projects, in cooperation with the project team leaders. Each of the 20 or more Federal projects (programs) for which the State office has administrative responsibility is headed by a project team leader who is responsible for the administration of his project under policies established by the Superintendent's Cabinet and the law governing his project. This means that he:

- Understands the objectives of the project;
- Influences the nature of activities undertaken within the project;
- Oversees the expenditure of funds within the project so that funds are expended

in accordance with the project purposes and established policy;

- Assumes initiative for changing or adapting projected plans as conditions change;
- Maintains liaison with persons in the field working within the project;
- Evaluates project effectiveness;
- Maintains management control over project operations;
- Meets regularly and frequently with the project team to insure communication with the various SEA divisions.

The project leader is responsible to his division head. He also maintains close contact with the Federal Liaison Officer to assure proper coordination of the operational aspects of his project.

Under the new administrative arrangement, the Title II team serves not only as an informal, inhouse advisory committee for overall planning of Title II but also carries on needed administrative tasks in accordance with individual responsibilities and competencies. Any member of the SEA staff may be called upon to serve as a temporary Title II team member if his specific skills are required. Through the other team leaders and the FPOC, coordination with other Federal projects and State programs is assured.

Accessibility of Loaned Materials

An amendment to the original Title II program in fiscal year 1967 required that States make appropriate amounts available to local education agencies out of administrative funds for responsibilities related to distribution and control of materials acquired under Title II. These funds are used in some States to support the preparation and dissemination of lists and catalogs of materials in certain subject areas and for special needs of children and teachers and the circulation of such materials within designated geographical areas. Reduced funds in the Title II program in 1969 necessitated some curtailment of these activities.

Effects of the interchange of materials are illustrated by the following:

- In *New York*, the 10 agencies assigned responsibility for preparing and disseminating lists of Title II available materials were the six large cities, two intermediate agencies in Nassau and Suffolk counties, Schenectady Regional Center, and Genesee Valley School Development Association. Lists were distributed to all children and teachers in these jurisdictions and loan procedures were developed to make listed materials readily accessible. Reports from these areas indicate increased circulation of the materials.
- *Vermont* reports maintenance and dissemination of lists of selected items purchased with Title II funds; however, since most schools are still building basic collections, there is relatively little acquisition of materials beyond those generally needed in each school.
- In two cases in *Maryland*, public school systems made their entire 16mm. film collections available; these collections were used heavily by private schools in the area, as well as occasionally by outside groups.
- *Puerto Rico* reported extensive increase in the use of films and other educational materials (from the six regional audiovisual centers).
- In *Mississippi*, the practice of exchanging materials through special listings was most effective in districts which use centralized processing in the preparation of materials.
- *Illinois* and *Missouri* reported that the lists had improved availability of materials in specific subject areas. However, several States question this regulation and recommend its cancellation. For example, *Wisconsin* felt the sharing of administrative funds with the local education agencies resulted in curtailment of activities at the State level; *Ohio*, with its ESEA II program emphasizing basic elementary collections, saw little need for lists or catalogs.

- *Idaho* and *Utah* transferred administrative funds to local educational agencies to make materials accessible. *Oklahoma* reported that 15 percent of participating Title II schools prepared lists of nonbasic materials and made such materials available to all schools in the system; 12 percent of the schools reported that duplicate materials were available and a nonbasic list for materials was not necessary; 73 percent of the participating schools had only one school site at each grade level and circulation of materials was not necessary. In *Wyoming* many librarians are planning their purchases on a long-range basis. For example, in one community the public, college, and school librarians decided which institutions would maintain particular magazine subscriptions or purchase single sets of expensive reference materials for common benefit.
- In *California* materials purchased for bilingual programs and advanced placement courses were widely circulated. In *Washington*, where there was an already established and effective interchange of materials among the public schools, they found it easier to widen these services to more students and teachers. Bulky, expensive, professional, or specialized materials were the ones most generally circulated, but there were no limitations on the kinds of material: printed library matter (other than encyclopedias); filmstrips; tape and disc recordings; periodicals; maps, charts, graphs, and globes; and slides and transparencies.
- The Learning Resources Center of *Guam* has prepared lists of audiovisual materials which are circulated throughout the island, and from time to time lists of new books and other instructional materials available at the Center are sent to schools. The Center also serves as a focal point for interchange of materials within the system. *Hawaii* carries resources purchased with Title II funds to children and teachers of more remote areas by public library bookmobiles. Arrangements are made for long-term loan to classroom teachers if needed, and lists of materials available in the local depositories and on the bookmobiles are distributed to the schools.

Other Kinds of Management Activity

State departments of education reported a number of changes in types of management activity such as overall planning, composition and function of advisory committees, and collection and dissemination of information, in fiscal year 1969. (These changes appear most frequently to have been caused by reduction in funds for administration of the State plan):

- *Massachusetts* reported a year of austerity in overall planning for 1969. New application forms were issued to consolidate and revise so as to reduce mailings and yet secure needed information. Minimum budgets were set and reductions made in funds allowed for field visits, travel, telephone costs, postage, and office supplies.
- *New York* reported curtailment of dissemination activities in that staff were unable to prepare and publish the 4th edition of *LAMP* (Library and Multimedia Programs), which was highly effective in disseminating descriptions of exemplary and innovative special-purpose grants. The loss of funds permitted fewer meetings of State advisory committees, though interdepartmental committees continued to function.
- Some States had to limit most of their planning to short-range activities. *Iowa* did manage to hold four planning meetings for area center personnel and the State Advisory Council. *Nebraska* held informal committee sessions at State education association meetings, but the *Minnesota* ESEA II Advisory Committee turned its duties over to the Federal Program Advisory Committee.
- Reliance on memos and publications,

with fewer site visits, provided limited dissemination of information. *Nebraska* and *Wisconsin*, requiring "status studies" as a part of the application, did collect information on staff, facilities, services, materials, and LEA effort.

- *Arizona* reduced expenditures of administrative funds by limiting consultative services largely to questions which could be answered by telephone or by correspondence and by holding no meetings of its Title II Advisory Committee. *Nevada* deleted some functions of its Advisory Committee as a temporary expedient to free more funds for acquisitions.

Support of Instruction

State department of education staff members reported that Title II contributed to the improvement of educational quality and opportunity for public and private school children in a number of ways; for example:

- Increased use of materials in instructional programs, including innovative curriculums and instructional techniques such as individualized instruction and flexible scheduling;
- Decreased reliance on single textbooks and increased use of a variety of materials;
- Continued development of organized media collections and unified media programs;
- Expanded services of professional staff members;
- Improved accessibility of materials through more flexible circulation and loan procedures and extended hours of service.
- In *Maine*, State instructional consultants offered subjective evidence that increased resources have affected teaching methods and pupil achievement:

  Mathematics. Although secondary schools have had a mathematics section in the school library for years, many of the libraries have been able to increase substantially the number of volumes on mathematics. A review of records reveals that mathematics books are receiving much greater use by pupils and teachers than before Title II.

  Industrial Arts. Schools and students with vocational interests are making better use of the school library to explore their interests through the use of vocational guidance materials, slides, and other instructional resources purchased with Title II funds.

  Home Economics. The greater availability of materials has meant that more individual study can be done with opportunity to review a wider range of resources from a variety of authors.

  Modern Foreign Languages. ESEA Title II enabled schools to obtain foreign language tapes, filmstrips, books with colored illustrations that can be used with opaque projectors, and supplemental books, especially biographies. These items are being used primarily to develop an increased awareness of the culture of the foreign countries whose languages are being studied.

Special Programs

Basically Title II did not single out special programs, but supported programs involving all children. However, Special Purpose Grants did focus on vocational, bilingual, and early childhood education and education for the handicapped. Funds were also available to State-supported schools for children with special problems.

- In *Montana*, State institutions for handicapped children are encouraged to select Title II materials suitable to the special needs of these children. In fiscal year 1969 special effort was made to provide large-print books for the blind. Schools located in areas with large Indian population were encouraged to purchase

books related to Indian history and culture.

- The *Louisiana* report indicates that the Title II program provided materials previously unavailable. For example, enrichment materials in the humanities included art prints, recordings, and filmstrips; in the social studies, maps and charts; and in the sciences, transparencies and films.

Reaction to the Program

- *Illinois* said: "Formal and informal reports indicate that the increased availability of materials . . . has resulted in the improvement of pupil achievement."
- *Ohio:* ". . . Unquestionably the children are reading more."
- *North Dakota:* "Title II has contributed to the improvement of instruction, especially in schools which contain truly inquiry-centered classes."
- *Kansas:* "Enrichment is the best word to use to describe what Title II materials have done for improvement of instruction in the elementary and secondary subject matter areas."
- *Georgia:* "Teaching has been more rewarding and learning more meaningful because of Title II."
- *Texas:* "The Education Agency is committed to the concept of the library as a collection of all types of materials appropriate to the school instructional program. The use of Title II funds has accelerated the acquisition of such nonbook materials as 8mm. films, filmstrips, slides, audio tapes, and discs, transparencies and, in some schools, microforms.

Other Effects

As an indirect result, in some States separate organizations of librarians and audiovisual personnel have been merging. *Nebraska* Educational Media Association is an example of this movement.

Many other States report that the program has encouraged and accelerated the development of unified school media programs of organized and cataloged print and audiovisual materials available to pupils and teachers. Principals and librarians have come around to the concept of a true media center, have expanded their planning to include the physical facilities, and have purchased equipment necessary to supplement the materials obtained under Title II. Many libraries that were previously book-oriented are now being converted into centers for various types of resources, as in *Hawaii*.

It was funding under Title II that encouraged some school districts to embark upon new means to improve instruction through a multimedia approach. In several cases, school districts have committed funds on a matching basis with a special grant from Title II funds to carry out an overall project. Annually the effects of the unified media center are demonstrated through records of student performance resulting from more varied approaches and techniques in the instructional process and the increased independent learning which is taking place (*Nevada*).

In *Washington* there were in fiscal year 1969 substantial increases in the numbers of requests to help plan new media centers and remodel "book libraries" into media centers. These requests came from media specialists and public and private school administrators throughout the State. An increase was also noted in the number of advertisements for librarians and media specialists, with a media approach and understanding of curriculum as essential job requirements.

Use and study of materials increase as collections are upgraded, organized and cataloged. Title II has contributed greatly to the acquisition of preprocessed materials and the wide-scale processing of other materials. Trained staff and better facilities are required to handle increased use of materials and increased demands for services by both pupils and teachers. More principals are scheduling to give all children time in the library, and media centers are being kept

open longer before and after school. Elementary schools libraries, nonexistent in *Guam* before Federal aid for instruction materials for media centers was available, have started with library collections to which they have been able to add. Full-time librarians have been hired to administer the collections and provide the needed services.

California school districts have been enabled to discard old sets of books after evaluating their holdings for the first time, and to replace them with better material. Even gift books not meeting the criteria of the districts' selection policies are now discarded or refused. Other States also report a marked improvement in the quality of materials and the replacement of obsolete, obsolescent, and unsuitable items, and addition of materials not previously in the collections, such as back issues of periodicals on microfilm, art prints, 8mm. film loops, documents, and professional materials for use of the school staff.

Increases in both basic and supplemental materials for specific subject areas or purposes are reported by all the States. Reading, remedial reading, and English as a second language were greatly strengthened through provision of much needed supplementary materials in schools run by the Bureau of Indian Affairs, for example. Among other subject areas frequently mentioned as being improved are science, social studies, and art; guidance has also benefited.

California specifically mentions as a by-product of the Title II program the realization of the value of a broad spectrum of materials to support the curriculum in all school districts—large and small.

Better ability to meet the needs of individual children and the provision of different types of media, printed and audiovisual, to appeal to different children were reported specifically by *Guam* as valuable contributions of Title II. There the program also supplied materials for children with interests in certain areas to pursue their studies in depth.

Some excerpts from the *Washington* report illustrate improvement of instruction in elementary and secondary subject areas:

- "Title II has provided students with a much wider range of reading materials. I believe it has also brought about publication of more easy-to-read books. When I go on surveys and visit classrooms I often look in the students' desks. Invariably there is a library book or two. It is encouraging to me that students have access to materials to pursue the greatest single free time activity in elementary schools—leisure reading."
- "In social studies we are moving away from the traditional text because it lacks humanism—textbook style is very sterile. Teachers find that readings from sources such as Sandburg's *Lincoln*, Freeman's *Washington*, and Pringle's *Roosevelt* are much more interesting, authentic, and readable. The great personalities in history derive a breath of life in this type of book. Surveys of traditional textbook programs show students ranking history as one of the most uninteresting subjects in the curriculum. Students involved in the new programs are much more actively involved in their studies. Title II has helped these new social studies programs which are built around a wide variety of media."
- "The senior students in the World Literature Survey Course at Columbia High School were very enthusiastic about the records which we used during our unit on oriental literature. These records, which were made available through a special-purpose Title II grant, enriched our study of Chinese, Japanese, and Indian literature. This appropriate music added to the students' understanding and appreciation of the contributions made to world culture by people from parts of the world about which we know so little."
- "The new materials purchased through the special-purpose grant have more than tripled the use my students in Washington State History have made of the library. The students are now able to do independent research and reading

which were virtually impossible before we received the grant."

Title II has made more materials available to children in special schools than they ever had before, including schools not eligible under other Federal programs. Special schools enrolling participating children include those for the deaf, the blind, children afflicted with cerebral palsy, and those in hospital schools (such as the *Arizona* Tuberculosis Sanitorium), youth in correctional institutions, neglected children, and the emotionally handicapped.

According to supervisors of special education in *Washington*, Title II has helped fill a gap for specific materials tailored to the individualized and special needs of children with educational limitations. NDEA Title III provided hardware for many programs for handicapped children, but this in turn created a need for softwear, which Title II has filled. One small school district was able to begin a special education program because Title II provided materials for the first time. A joint interdepartmental (SEA-Institutions) Committee will serve as a more effective vehicle for the Title II program aiding special State schools and those sponsored by other agencies. The same committee served as a liaison agency for 29 day care centers which received funds for the first time under Title II and purchased materials which have helped initiate preschool-type training programs such as self-care, communication, and motor coordination. Puzzles, large-letter games, filmstrips, and slides have been used for eye-hand coordination, motor skills development, perceptual motor development, and as a means of beginning verbal and nonverbal communication.

Every item purchased under Title II by the Bureau of Indian Affairs (BIA) and most of those acquired by *Guam*, *Trust Territory of the Pacific Islands*, and *Hawaii* support directly or indirectly programs for educationally and culturally disadvantaged children. Even in *California* a survey of the Phase I (basic grant) projects indicated that some 70 percent of the districts funded and 57 percent of the Phase II (special-purpose grant) projects qualified as areas with a substantial number of students who were educationally and economically disadvantaged and for many of whom English was a second language. In all the States mentioned above and in the BIA great emphasis was placed on materials to support programs of English as a second language.

In *Guam*, Title II materials have made possible the change from more traditional methods of instruction to team teaching, remedial and developmental reading, and the nongraded primary. Books and other printed materials and audiovisual materials are being used for presentations, reports, and group discussions in team teaching. Teachers no longer rely on the single textbook approach to learning; they have been using the wide collection of print and audiovisual materials now available in the school libraries. Indepth instructional programs in special subjects have also been supported by these materials. Children have learned how to use audiovisual materials and equipment for enjoyment as well as for assigned work and reading for enjoyment has become a part of their lives for the first time.

Examples of newer teaching techniques most frequently employed by teachers, as reported by *Nevada* subject supervisors, were individualized instruction, continuous progress education, nongraded instruction, the independent project approach to the teaching of social studies, individually tailored programs, the discovery method, the concept approach. All these techniques were made possible by extra and special materials supplied by Title II. In addition to some of the approaches mentioned above, *California* reported that the trend toward independent study in many districts in the State has received substantial impetus through the availability of a wider selection of materials which came from Title II funds. *Oregon* also mentioned that the use of small group instruction is increasing with each group using various kinds of printed and audiovisual materials such as reference books, periodicals, maps, globes. This is particularly true in the secondary school social studies field, and was pos-

sible because of the availability of materials under Title II and other Federal programs.

The introduction of innovative curriculums has been supported to a considerable degree in the *Trust Territory of the Pacific Islands* by Title II. In mathematics, for example, as a result of the work of the specialist and her workshop group, a program designed for use by developing nations where English is the second language has been introduced, and the essential materials to get it under way were purchased for the use of children and teachers in public and private schools.

California's 115 Phase II (special-purpose grant) projects serve as demonstrations of the value of and the need for good media centers to support the educational program. Examples of innovative practices included in these projects are dial access to audiovisual and print resources, circulation to teachers and children of all materials and equipment, use of the computer in ordering.

The *Washington* SEA has encouraged districts to develop projects which will promote the effective introduction of new media in specific situations. Examples include one devoted to careful selection, evaluation, and exemplary use of 8 mm. films in an elementary urban school (grades 3–6); an 11th-grade American history project using original source materials on microfilm which also has as one of its objectives research into the problem of periodical storage; an art education program (K-12) involving the extensive use of art prints. A special purpose grant for vocational education was awarded a district to provide short films and kinescopes on 168 different occupations. These are expected to be placed in school libraries as 8mm. film and cassette tapes for individual pupil use. The local educational television station will broadcast the films regularly. Nearby industries have contributed money, time, personnel, and advice to this project, which began in the fall of 1969.

In *Arizona*, Title II coordinated its efforts with the BIA Phoenix Area Office; the Papago Agency, and the Santa Rosa Boarding School on the Papago Reservation to promote a media center supportive of the main school and four outlying Bureau schools, several mission schools, and the public school (through the Papago Agency bookmobile). The program is in its early stage, and is expected to contribute greatly to meeting the educational needs of Papago children, as well as to serve as a demonstration model throughout the Bureau.

In *Oregon*, Title II has improved the instructional resources in elementary and secondary subject areas by:

- Coordination of efforts by teachers and librarians in the acquisition of reference materials and their use;
- Providing materials which can be used in developing "learning packages" which depend heavily on materials and equipment;
- Implementing new and updated courses with current materials, print and nonprint.

As in other States, the Title II program has contributed to the improvement of the quality of materials by:

- Insisting that materials be purchased that will aid in the improvement of instruction;
- Pointing out that the use of multimedia materials will benefit both children and teachers;
- Encouraging the development of libraries, where none existed before, or were only a storage room for books, etc. This development of attractive media centers has made the children and teachers proud of their facilities and made them aware of such a thing as quality in materials. Personnel in the State Library have commented that requests from schools have gone from storybook dominance to a wide range of resource material, with fewer storybooks.

School Media Personnel

Staff members assigned to ESEA Title II programs in State departments of education reported that significant numbers of media

specialists, technicians, and clerks have been employed at local levels as a result of Federal programs. For example:

The increase in school media personnel in *New Hampshire* has been particularly gratifying because of efforts to implement standards for public elementary schools. The number of full-time librarians has increased 125 percent from 38 to 84; some 25 supporting media aides or technicians have been employed for tasks related to Title II and other Federal programs involving instructional media.

New Jersey reported that a conservative estimate of the growth of the school media program is that at least 50 percent of additional public school media staff are directly the result of Federal programs.

In *Pennsylvania*, 538 additional school librarians have been employed since the ESEA Title II program began. The number of supporting media aides and technicians has increased from 75 in 1965 to approximately 500.

Eight hundred media specialists, technicians and clerks have been added in *Alabama* since the beginning of the Title II program. *Florida* added 93 media specialists and 108 aides during fiscal year 1969; 100 clerical positions funded in fiscal year 1968 proved so valuable they were funded in fiscal year 1969 by LEAs. *Kentucky* reported 277 media specialists and 141 clerks; *South Carolina*, 265 librarians and 115 library aides; *Tennessee*, 200 media specialists and 100 clerical aides; *Maryland*, 3 district librarians, 28 school librarians and 84 aides/technicians; *Puerto Rico*, 35 media specialists and 64 librarians.

It is estimated in *Utah* that 12 professional coordinators, 20 technicians, and 40 clerks have been employed as a result of Federal programs of financial assistance to local school media programs. In *Wyoming* some 195 clerks and aides have been employed under ESEA Titles I and III, and approximately 13 librarians have been employed as a direct or indirect result of ESEA Titles I, II, and III. It is reported from *Oklahoma* that at least one person was added in each district as a media specialist, technician, or clerk. This would be at least 600 persons who have been employed as a result of Federal programs in local school media centers.

Kansas added 29 school library coordinators, 18 audiovisual coordinators and 150 library aides; *Wisconsin*, 37 professional school librarians, 4 district supervisors, 75 clerks; and *Missouri*, 40 new media specialists. Other States found it difficult to make such estimates, but project descriptions and long-range plans of local districts indicate their wish to hire additional staff, professional and supporting.

Staff Development

State departments of education continued in fiscal year 1969 their programs of providing leadership, supervision, and staff development opportunities to local educational agencies participating in the ESEA Title II program. These programs have been conducted to help teachers and media specialists understand the value of a broad base of instructional materials, to know the materials, and to know how to use them effectively. The following excerpts from the State annual reports are examples of the kind of staff development opportunities provided:

- *Delaware* conducted a 3-day conference, The Multi-Media Approach to Learning, to update the education of 85 school media specialists, teachers, curriculum consultants, and school administrators. The topics presented included leadership activities, concepts in communication, evaluation, automated learning, and media production.
- *Massachusetts* provided staff development opportunities through the ESEA Title II demonstration media programs. One presentation at Oakmont Regional High School, South Ashburnham, on the use of instructional materials to support the curriculum, attracted 120 school personnel.
- Staff development opportunities with certification credit are available to *New*

Hampshire school personnel. Six institutes, supported jointly in fiscal year 1969 by the State Department of Education, the New Hampshire School Library Association, and the University of New Hampshire, have enabled 68 participants to earn needed credits and broaden their concept of school media programs. Some indication of the success of the programs is given by the fact that the University of New Hampshire has now assumed support of the project.

- *North Carolina* held a 3-day conference on independent study in cooperation with the North Carolina Association of School Librarians which attracted 900 school librarians, instructional supervisors, library supervisors, and library education personnel from public and private schools, colleges, and universities throughout the State. Focus was directed on instructional media to support independent study.
- Inservice training in the selection, organization, and use of instructional materials was given by the supervisors at the Department of Education Central Office in *Puerto Rico* to the Regional Media Specialists who are in charge of training audiovisual specialists at the school district, curriculum center, and school building levels. Private school personnel were also trained.
- Lack of staff and administrative funds prompted *Wisconsin* to try out a large Educational Telephone Network series of five programs, built around the topic, "Non-Book Materials in School Libraries." Four hundred thirty-five librarians and audiovisual staff in 31 cities participated in seven hours of inservice training. It was not the most effective way, but it seemed better than nothing.
- The *Utah* report states that the availability of materials has motivated teachers to become involved in inservice activities at universities or in local, regional, or State workshops to assist them in the use of these materials in the instructional program. Improvement in instructional practices has been demonstrated.
- In *Louisiana* workshops and inservice education at parish and school levels, the emphasis continued on the selection of quality materials for media programs. The criteria of selectivity were made effective through recommendation of standard selection aids and suggestion of new media. Schools were encouraged to expand and enrich their resources after acquiring basic collections of all types of materials and to evaluate their collections to determine continuing needs.
- No inservice training sessions were held in *Arizona* and *Nevada* during fiscal year 1969 because of cuts in staff and funds for administrative activities. The *Arizona* Department of Public Instruction prepared and distributed a newsletter promoting the use of paperbacks and discussing problems concerning selection of materials by and about minorities. *Nevada* conducted site visits to libraries and had conference discussions with media personnel.
- Training of school library personnel received high priority in workshops conducted by the Bureau of Indian Affairs. In Juneau, the Director of the Media Section of the Instructional Service Center worked with seven media aides in inservice training sessions, and two library aides were trained for six weeks at the Bureau's Professional Library to enhance their abilities to provide services necessary for effective use of audiovisual materials. In addition, two full-time instructional media center coordinators received additional training at the Instructional Service Center.
- *California* also arranged and conducted inservice training at a joint workshop for 175 school administrators and librarians from three counties—sessions devoted to fundamental problems in the selection, organization, and use of materials acquired under the Title II program. *Guam* had similar conferences for media personnel at its Learning Re-

sources Center and at school libraries, with some workshops limited to inexperienced library personnel.

- Elementary school principals were the participants in a six-session workshop held in one county in *California* to work on implementation of effective elementary school libraries. Many other such workshops were requested of the SEA, but they could not be funded.
- The Learning Resources staff of the *Washington* SEA held inservice meetings with professional regional and State associations on such topics as the role of the media center; designing facilities for better media programs; selection of materials; censorship; cataloging and classifying nonprint materials for use; certification of media specialists according to behavioral objectives, with teacher education institutions, school district personnel and other SEA staff also participating; standards implementation, both State and national; ways of working with administrators to effect change in educational programs; possibilities of program involvement under Federal legislation.
- Inservice training was also supplied to provide better services for special groups of children. *Guam* conducted workshops for librarians working with disadvantaged children. In one *California* county, 150 administrators, teachers, and librarians spent two days hearing presentations and discussing the specialized use of materials for gifted children. A workshop of three eight-day sessions was set up by the California SEA for teachers, school administrators, curriculum personnel, and school board members from three county offices and twelve school districts whose focus was on innovative practices with special emphasis on independent study and the use of school library resources. Each school then sent teams of teachers, administrators, and board members to observe innovative programs in operation in schools.

Selection of Materials

Under the ESEA Title II program, State departments of education have stressed the critical evaluation of materials. State department of education personnel gave assistance in development of project applications and held State, regional, county, or school system conferences.

Outstanding in nearly every Title II report is the increasing attention being given to the selection of materials especially suited to the needs of educationally and culturally deprived children and those with special needs, and to materials which treat all ethnic groups with fairness. The following examples illustrate this kind of activity:

- The bibliography of suggested selection tools in the New York Title II Planning Guide has been updated, with more than 100 new titles added, with those specifically evaluating and listing materials for compensatory and special education programs identified. In addition, new bibliographies useful in bilingual and Black studies programs have been prepared.
- *Arizona, Guam, Oregon, Washington* and BIA all made efforts to help provide materials for children with special needs (the handicapped, bilingual, those educationally and economically disadvantaged, and those in early childhood, vocational, and advanced placement programs) by disseminating bibliographies of materials especially suitable. The SEAs have either provided consultative and inservice training on selection and use of materials suitable for these children, with special attention to individualized instruction, or have encouraged the LEAs to do so.
- In *Washington*, the SEA subject area supervisors worked together in developing special-purpose grants for children and teachers with special needs.
- Media specialists in *Rhode Island* are working to strengthen holdings in Black history and literature, using a comprehensive bibliography prepared by the State Department of Education. Em-

phasis is also placed on selection of materials for use in Title I, bilingual, and early childhood education programs.

- *New Jersey* reports increased interest in selection of audiovisual materials and intensive use of the relatively few selection aids for such materials. State school media consultants have prepared exhibits of both print and audiovisual multi-ethnic materials for conferences and workshops.
- *Wisconsin* put approximately one-third of its funds into special projects which identified and supplied the special needs of children and teachers.
- In past years, the *Ohio* Special Purpose Grants provided collections for slow learners, psychotic adolescents, the blind, and minority groups.
- Shawnee Mission Center for Special Education and the Center for the Visually Handicapped received acquisition funds from the *Kansas* ESEA II program.

A major strength of the program was the increased involvement of teachers in the selection process. *Georgia* reports that selection aids purchased with Title II funds have caused great improvement in the quality of choices made; responsibility for selection tends to be shifted more and more to the local level. In *Oregon*, subject specialists discuss with teachers materials that would be beneficial to the pupils under their supervision, referring to the various selection aids covered by the Title II *Handbook* and the curriculum guides printed by the State; they also provide demonstrations on the use of materials at local level. The insistence by the State education agencies on the use by local agencies of standard selection aids, of a written selection policy, and of involving teachers in the selection, has resulted in higher quality in the materials reaching the classroom.

In the *Trust Territory of the Pacific Islands*, the science materials provided with Title II funds in each of the six school districts had to be selected with the total range of pupils in mind from preprimary to upper secondary. Translation into the vernacular had to be a consideration, as did vocational education, since teachers and administrators had to think in terms of relating the materials and their use to the world of work.

Standards for Instructional Materials

Standards for school library resources, textbooks, and other instructional materials have served the general purposes of all educational standards: to set minimum levels below which no instructional program can be effective and to encourage efforts not only to meet standards but to go beyond them toward excellence in educational opportunity. Leadership in the development of standards has been provided by State departments of education, which organize committees representative of the educational community to assist with this work. Updating and upgrading of standards continues to be a constant concern.

In fiscal year 1969, *New Jersey* was reviewing standards to reflect the unified media concept, revision having been recommended by the New Jersey School Media Association.

Standards for school media programs in *Delaware* were completed by committees of local supervisors and media specialists with the cooperation of the State Supervisor of Library Services, and were ready for the approval of other educational groups and the State Board of Education.

Late in fiscal year 1969 *Massachusetts* began to organize a committee composed of State agency staff members, school superintendents, principals, directors of instruction, teachers, school media specialists, and private school representatives to begin revision of school media standards.

Copies of the new *Standards for New Hampshire Elementary Schools*, containing sections relating to media facilities, staff, and services were distributed to all elementary school principals. Administrators thus have an opportunity to assess the adequacy of their media services and are being asked to meet minimum standards by 1972.

In *Alabama*, the books-per-child average

has reached 5.5 but is still below the minimum State standard of 6. *North Carolina* reports 10.62 books per child, an increase from 7.49 in five years, while *South Carolina* averaged 11.8 in fiscal year 1969. *Tennessee* set its books-per-child standard in fiscal year 1969 at 6, to go to 8 by fiscal year 1972. Standards were revised by *Georgia* in fiscal year 1969, will be rewritten in *Kentucky* in fiscal year 1970. *West Virginia's* revision of its State Comprehensive Educational Program will incorporate the new *Standards* (1969) set by the American Association of School Librarians and the Department of Audiovisual Instruction (DAVI) of the National Education Association (NEA). Revision is in progress in *Maryland* also: 51.6 percent of Maryland's schools now meet the present minimum standard of 5,000 volumes, an increase from 23 percent in 1965, and double the number of schools meeting the minimum standards during the previous 4 years of Title II. *Wisconsin* reported half its high schools, 43 percent of its junior high schools, and 39 percent of elementary schools now meet State standards. *Ohio* had 24.9 percent of the districts reporting an average of 10 or more books per pupil.

Some States revised their State requirements for school media programs, using the *American Library Association—DAVI Standards of School Media Programs* as a guide for long-range planning, and held numerous conferences and seminars to study the new ALA-DAVI Standards. Examples of publications concerning revision are *Iowa's Plans for Progress in the Media Center K-6*, and *Ohio's Revised Minimum Standards for Ohio Junior High Schools*, and *for Senior High Schools*. In *Texas*, tentative media standards have been distributed to city supervisors and other key educators for evaluation, and a statewide institute has been held on the implementation of national standards, as has a State regional meeting in which the national standards have received special program emphasis.

Standards, based on the 1969 national criteria, were revised in district level workshops in *Utah*. In 1969–70, the Title II staff will conduct regional workshops to help local media personnel implement these standards.

Updated State school library standards were approved by the *Louisiana* State Board of Education in 1968 and became effective in the 1968–69 school year. The new standards included personnel, collections, facilities, budget, and program components.

A University of Idaho doctoral dissertation examines and compares the public secondary school library program in the State with the adopted State school library standards, the school library standards of the Northwest Association of Secondary and Higher Schools, and those of the American Library Association. The author concludes:

> In general, many secondary schools in Idaho are below the State, regional, and national library standards, ranging from 12.06 percent to 86.11 percent below, and the degree of inadequacy is relevant to the different requirements in each standard. This investigation revealed that the number of schools below the regional standards is smaller than that below the State standards and the number of schools below the State standards is smaller than that below the national standards, simply because the regional standards are the lowest and the national standards, the highest.

Arizona doubts that if all materials in the schools which are really outdated or worn beyond use were really discarded, much progress could be observed toward meeting standards.

A school library study conducted in *California* in 1963–64 indicated that more than 6 million books would be required to bring elementary school libraries up to the 1960 *ALA Standards for School Library Programs*. It also showed that the high school libraries averaged 5.3 books per pupil and elementary schools 4.8 books per pupil at that time. Because of Title II and district effort, the average number of books per pupil in elementary schools is now 5.6 books (an increase of .8 books) and in secondary schools it is now 8 books (an increase of 2.7). At the present time, about 8 percent of *Oregon's*

schools do not have fully organized audio-visual materials, and 35 percent do not meet minimum standards of 10 books per pupil.

Guam is considering revising its 1966 standards on the basis of periodic reviews, studies, and surveys. About half of its schools now meet the requirements of Phase II of the standards, while one-fourth have reached Phase III, and the remainder are on Phase IV and Phase V.

Nevada has not made any changes in its standards since they were published in 1963. The State has been reasonably successful in meeting the ALA 1960 *Standards*. There are still gaps in such areas as filmstrips, film loops, tape and disc recordings, and even certain categories of printed materials. In anticipation of the preparation of new State standards to be published in 1970, a statewide standards revision committee has been formed, made up of educators and lay people. This committee is expected to recommend not only revised standards for school library resources and instructional materials, but also procedures for their review, selection, and acquisition.

Standards for Integrating School Library and Media Services were approved by *Washington* in December 1968 for the improvement of learning resources services and as a basis for continual evaluation of these programs. A State Standards Implementation Committee has been formed with representation from the SEA and professional groups. The State reports, from its 1969 Title II inventory records, significant gains since 1965: the average number of books per pupil has risen from 8.5 to 9.8 and is thus close to the State's standard of 10. Substantial increases have also occurred in the purchase of nonprint materials, but the drop in Title II funding slowed down the rate of progress toward meeting standards.

Evaluation of the Title II Program

Under the Title II program, administrative and supervisory staff in State departments of education make periodic assessments of administrative and program practices to evaluate their effectiveness and determine to what extent management and program changes are needed. Data obtained from local school officials in combination with subjective evaluation of educational changes are used to assess the impact of the program. Examples of procedures used to evaluate the impact of the increased resources provided under Title II on educational quality and opportunity include:

- *Connecticut* uses project applications as a primary evaluative process, each application indicating need for materials and long-range plans for improving educational services with Title II materials. Schools reporting establishment of new media centers indicate the extent to which Title II materials contributed to the increase of improved service.
- *Massachusetts* reports that a number of individual research projects on the impact of Title II are currently in progress. A study of Federal programs in five New England States is being conducted by the Policy Institute, Syracuse University.
- *New Jersey* extracted some interesting evaluative data on public and private school media programs from applications for the Title II program. For example, the number of private elementary school children enrolled in schools with centralized libraries rose from 28,266 in 1966 to 82,388 in 1968. In 1966, private school children in New Jersey were in schools which had only classroom collections numbered 107,203. In 1968, this number had been reduced to 30,394.
- *Alabama* conducts an annual survey which measures the growth and development of school libraries. Survey data is compiled to give a composite picture of library service throughout the State.
- In *Florida* the Title II office is collaborating with the School Accreditation Section of the Department of Education in the development of qualitative standards for educational media. This is a part of the study and revision of the State's School Accreditation Standards which

will result in an examination of the quality of educational programs in addition to the quantitative aspects of programs which have been examined so often in the past. One district, on its own, is attempting to correlate the increase in the availability of educational media with changes in achievement test performance.

- *Maryland* conducted a statewide survey of all public, private, and institutional schools in the spring of 1969 which produced statistics concerning the number of schools with central libraries, size of collections, ratio of non-print to print material, and staffing.
- The development of the Title III ESEA annual needs assessment models in the *District of Columbia* and *South Carolina* will include library information.
- *Alabama* reports more than 80 percent of its elementary schools now offering some centralized service to children and teachers, as against 50 percent at the inception of the Title II program. The almost daily arrival of specifications for new library (media) centers gives evidence that many secondary schools are purchasing non-print materials and have adopted the complete media service concept.
- Based on a questionnaire sent to all LEAs, *Florida* reports that the availability of improved collections has stimulated children, particularly in low income areas, to read more, improving their general school performance.
- Isolated surveys in *Kentucky* reveal that books per child in Jefferson County have reached 8.5 from 7.2, even though there was a corresponding increase in enrollment of 12,000 students; 10 libraries were established in Floyd County, with 3,585 children having library service for the first time; in the city of Murray, public support has increased to the extent that new libraries have been opened in the three elementary schools; additional professional librarians have been employed and much resource material added. This has arisen from public awareness of the importance of library materials.
- Of all the materials now available for use by children in public schools in *Maryland*, eight percent have been provided under Title II during the four years of its existence. These include 678,524 books, 88,993 filmstrips and microfilms, and 49,958 slides and transparencies as part of the total of 925,324 items purchased. Title II has made available for the use of private school children and teachers 156,058 books, 26,427 filmstrips and microfilms, and 16,883 slides and transparencies in a total of 218,748 items.
- In *Puerto Rico* acquisition of instructional materials such as filmstrips, recordings, tapes and films was very limited prior to Title II. Acquisition of these new materials has made possible the attempt to individualize instruction, particularly at the secondary level. Also in Puerto Rico, Title II funds have made it possible for the school system to give each child in elementary and secondary classrooms a copy of each one of the basic texts for the developmental phase of teaching reading and language.
- In *North Carolina*, the Demonstration School Libraries Project continues to provoke much favorable reaction with local effort increasing in each participating district. The Educational Media Mobile, housing selection aids and media, is heavily scheduled to school administrative units and to colleges and universities which hold media institutes and workshops.
- The *Ohio* ESEA Title II program in cooperation with ESEA Title III contracted with the Battelle Memorial Institute to evaluate school library needs (including manpower). "The quantitative results showed that many of the schools sampled do not meet all the minimum Ohio standards, and very few meet all the ALA 1960 *Standards*," reported the Institute. Facilities and equipment,

and improvement in library services were identified by teachers and librarians as major needs. So was manpower: there was a general shortage of qualified librarians—one certificated for every 3.3 schools, or one librarian per 1,839 students, even though the Institute found more than 4,300 library assistants working in schools, with 76 percent serving in elementary schools.

- In *Minnesota*, local effort rose from $3.52 to $5.32 per student.
- *Wisconsin* saw a 16 percent rise in funding and 59 percent of senior high schools meeting minimum State standards, as against 12 percent prior to ESEA II.
- In *Colorado*, Title II has had an impact on the more progressive school districts, while some of the smaller districts are experimenting with various forms of cooperation. Fourteen Boards of Cooperative Services have been set up with the common goal of providing unified school media programs for their member school districts.
- The success of the unified school media program in *Arkansas* has been reflected in better overall organization of material, economy in expenditure, elimination of duplication of materials, wider use of resources purchased, and greater variety of materials on particular subjects.
- *Hawaii* made a survey of school librarians to evaluate the types and extent of duties performed, their professional backgrounds and experience and educational qualifications. The survey showed that the statewide weekly average for working time spent by librarians was: services to teachers (e.g., search for materials, compilation of bibliographies, assistance in selecting materials for the curriculum) 18 percent; services to students (e.g., reference work, instruction in use of library materials, selection of reading materials for classroom needs and personal interest) 36 percent; audiovisual services (e.g., circulation of audiovisual equipment, film bookings, instruction in the use of equipment, workshops) 6 percent; clerical work (e.g., clerical tasks involved in making services and materials available, processing purchase orders, invoices, and materials) 33 percent; and other responsibilities (e.g., preparing budget requests, correspondence, acting as adviser to student groups) 7 percent. A similar survey is in progress for audiovisual coordinators.
- In *Nevada* a study of equipment, facilities, and materials available in the schools was completed, and the results, when applied to State standards published in 1963, show some evidence of closing the gap. But when they are applied to the new ALA-NEA *Standards for School Media Programs*, there is evident a need for increased assignment of State and local resources for media programs, and for leadership on the national level for the development of such programs.
- Two studies were conducted on the effectiveness of *California's* Phase II projects, one under an SEA contract. The findings of one study seem to warrant the following conclusions, as applied to the 48 schools which received Phase II grants during fiscal year 1966:

  Federal aid to school libraries results in the enrichment of library programs.

  Phase II grants encourage the establishment of new elementary school libraries and the expansion of existing ones.

  Phase II grants assist in promoting the media center concept.

  The development of an unusual or model library has great value in demonstrating the benefits of a full program of instructional materials.

  Although Federal aid in general had a good effect on libraries in California, there were some serious drawbacks:

  a. Not enough time for selection and purchase of materials;

b. Insufficient staff to carry out the program; and
c. Inadequate facilities for the program.

The Phase II program would be more effective if additional consultant staff were provided in the Bureau of Audio-Visual and School Library Education in the State Department of Education.

School district support is necessary for the development of a strong library program.

Continued and increased assistance is needed to bring many of the libraries up to national and State school library standards.

Preliminary findings from the other study for schools with Phase II grants in fiscal years 1966 and 1967 were quite similar. The librarians responded in the following rank order to what they felt had been the most successful parts of the project:

1. The new and wide range of materials;
2. The expansion to multimedia of the library collection;
3. Increased student use;
4. Impact in the field of curriculum involvement and change; and
5. Factors related to increased services, increased personnel, and the effect which the project had upon school library development within their districts.

Responding librarians indicated as drawbacks to full success of the project: lack of time to select and process materials, lack of adequate space and personnel, and poor cooperation by the district. Problems with children and teachers were minor deterrents.

- In 1968–69 the *Washington* SEA conducted a special-purpose grant survey to determine specific objectives (couched in administrative rather than behavioral terms) as perceived by the school districts, and the degree to which they had fulfilled those objectives. In rank order the most frequently stated objectives were:

1. To individualize instruction (8).
2. To expand library facilities and materials (7).
3. To provide for independent study (5).
3. To provide indepth resources (5).
4. To enrich total offerings of libraries (3).
4. To increase opportunities for pupils to acquire skills (3).
5. To create a learning resource center (2).

Subject areas supported by special-purpose grants were:

1. Social studies (8).
2. Health and sex education (4).
3. Intercultural education (disadvantaged or minority groups) (3).
3. Humanities (3).
4. Nongraded English (2).
4. Science (2).
5. Reading (1).

As a direct benefit of their Title II funds, districts with special-purpose grants reported that they were developing a systematic approach to instruction and increased use of the library facilities and learning resources materials, and also indicated that they had achieved a high degree of satisfaction in the accomplishment of their listed objectives.

Standards and Needs

The impact of the ESEA Title II program on educational quality and opportunity for children in the Nation's schools can be measured to some extent by reports on the increased quality and quantity of resources. Standards developed or revised under Title II have served as factors in establishing relative need for the distribution of materials under the program and also as measures for determining the needs of children and teachers for additional materials. Some States have conducted surveys of instructional materials collections and services in local educational agencies and are able to report significant gains as well as further needs.

- *New Jersey*, for example, reported the following statistical data, noting that despite increased collections, staff, and

(Per pupil)	Standard	FY 1969 Actual Public	Private
Librarians	1/500	1/1095	1/1224
Books	10	6.5	5.0
Support (State & local)..	$4–6	$5.12	$2.90

support, the State had, as we saw earlier, far to go.

- *Delaware* set tentative standards for materials in 1967 to determine the need in order to apply the relative-need formula in the administration of Title II. The following statistics show the degree to which standards were met in 1968 and 1969:

Standard	1968 (188 schools)	1969 (191 schools)
10 volumes per pupil.	24%	48%
750 filmstrips	8%	12%
500 recordings	1.5%	2.6%

- The *Rhode Island* report states: In 1959, only 20 percent of its public schools provided any kind of library service to children; the ratio of librarian to children was 1/4600, and 66 cents per pupil was being spent on library materials. Ten years later, 88 percent of the schools provide library service, the ratio of librarian per pupil is 1/800, there are 6.2 books per pupil, and $2.80 per pupil is being spent locally for library materials. In relation to standards, however, for the 173,976 public school children the State needs 3.4 million volumes, even larger quantities of audiovisual materials, and $7 million annual expenditures for print and audiovisual materials to maintain a level of excellence.

In assessing the levels and subject areas where there is still a great lack, nearly every State pointed to need for elementary school materials. It is estimated that at present, the percentages of elementary schools still *without* libraries in selected Northeastern States are as follows:

State	*Percentage*
Connecticut	35
Delaware	6
Maine	60
Massachusetts	57
New Hampshire	66
New Jersey	45
New York	16
Pennsylvania	56
Rhode Island	12
Vermont	75

While these reports indicate marked progress under Title II there remains much of the road to be traveled toward the goal of improving instructional techniques and pupil achievement through the use of these media.

Alabama, *District of Columbia*, and *Tennessee* listed non-print materials as being in greater need than print. *Florida* listed print as a first priority with high interest, and low vocabulary materials needed at both elementary and secondary levels.

Alabama and the *District of Columbia* find that elementary needs are greatest. *Georgia* lists junior high level materials as most needed. *South Carolina* feels that secondary school requirements are the most pressing. *Puerto Rico* needs all-level English textbooks, elementary Spanish and science textbooks, and secondary French textbooks.

Nineteen States viewed the greatest need at the State level as being additional media consultative personnel to permit extending services to LEAs, assisting further in inservice training programs, and implementing the media center concept. *South Carolina* felt that a technical consultant in management

information would be of greatest service to the program. Supportive staff was seen as a great need, with specific mention of graphic artists.

A number of States consider audiovisual materials for elementary schools their greatest lack. *Iowa* indicated a need for vocational agriculture, home economics, business education, and industrial arts materials in addition to materials for elementary schools. *South Dakota* lists social studies and language arts. Several States stressed the need for all kinds of materials for all grade levels.

Texas, through packaging of Federal and State programs, zeroes in on identified priority areas. It finds acute the need for printed and audiovisual materials for bilingual education and for the gifted and early childhood programs, as well as for printed and audiovisual materials for vocational education, grades 6–12. *Oklahoma*, *Utah*, and *Idaho* report the need for audiovisual materials, especially at the elementary level. *Texas* and *Utah* also make the point that without Federal funds, they cannot provide sufficient library and media personnel for public school districts.

Arizona and *Oregon* both lack State school library supervisors and audiovisual specialists. The Bureau of Indian Affairs needs another person available to prepare more adequate selection aids which have been evaluated for their adaptability to Indian children. In *California*, the problem remains the same as last year—not nearly enough people to do the job as well as it should be done. A qualified person is needed to help the Title II Coordinator provide more services for the availability and utilization of materials; this person could also supervise the acquisition and processing of materials purchased with Title II funds, thereby making materials available for use more quickly.

The *Nevada* SEA needs a consultant whose sole responsibility would be establishing practices for the quality review of the instructional materials, making suggestions and recommendations to LEAs about the quantity, quality, and use of materials, and helping district personnel select materials and plan programs for optimum use.

The personnel in the *Washington* SEA Learning Resources Section declined from three to two by September 1969 because of the uncertain funding of Title II, with consequent reduction in clerical staff, and diminution in services. The State budget for the SEA was also lower than requested, and program development in all areas is adversely affected. A critical need is increased staff time for analyzing specific needs; developing long-range implementation plans, including coordination of Title II with other Federal and State programs; and increased staff time to help districts initiate and carry through innovations and effective projects.

In *California*, the ratio of qualified and credentialed school librarians and audiovisual personnel in LEAs is approximately one for each 2,500 pupils.

By the recent *Standards for School Media Programs*, the needs in *Hawaii* are great in terms of more staffing, space, equipment, and resources if the State is to reach its goals for quality education. There is continued need for professional and support staff at LEA and school levels. Each district has appointed a liaison person, but few have the professional training or experience to qualify as media specialists, and all have other professional responsibilities. None of the districts has a complete media center with sufficient equipment and resources. The Hawaii *Annual School Library/Media Report* survey pointed out that a large percentage of the school librarians' time is spent in clerical work.

With the exception of the two urban areas in *Nevada*, all local county school districts are in need of additional professional and support personnel. This carries with it an implied necessity to remodel existing facilities and to plan new facilities for effective instructional procedures.

The number of media specialists, technicians, and clerks employed in *Washington* State as a result of Federal monies for local media programs gives little indication of the

real need which is for an increase in the number and quality of such personnel. Experience has shown the SEA that effective media programs evolve only if there is wholehearted support of administrators and if the media persons most directly responsible for project implementation possess the necessary skills. Most of the schools (approximately 1,700) lack adequate well-designed space to increase the availability of materials and their effective use except on a piecemeal basis; the best use is therefore not being made of the staff and facilities already available.

It is well established that to make the programs most effective, there is particular need for audiovisual materials suitable for individualized use by pupils. The demand for records, tapes, film loops, filmstrips, study prints, study kits, and art prints which can be checked out and taken home or used elsewhere in the school is growing.

Arizona believes that because its schools have very few materials, they tend to keep too many things which are no longer useful or which, in fact, may be liabilities rather than assets.

Whatever progress was made in *Nevada* in closing the materials gap was all but wiped out by higher standards resulting from the media center concept and by greater demands placed on education. Regardless of effort, need is still evident, still felt, and still critical. The SEA staff offers, as examples of kinds of materials most urgently needed: updated science materials; interesting, easy-to-understand materials for beginning, slow, and reluctant readers; vast amounts of material to permit independent study and newer instructional techniques, particularly in secondary school social studies; materials of all kinds to support new curriculums and subject areas on which increased emphasis is being placed, such as economics, political science and local government, international relations, psychology, sex education, drugs and narcotics, computer technology, oceanography, and moral and ethical values.

Also critically needed are specialized materials such as those for guidance and vocational education related to trades, industries, and careers; for early childhood education; for the disadvantaged; for the gifted, and for the handicapped. For example, special education supervisors in the *California* SEA are often appalled by the dearth of materials in special schools for the handicapped, primarily because of restricted budgets. BIA reports that a predominant problem of deafness in Indian and Eskimo youth is just being recognized, and that much special material is required. Suitable materials for bilingual education are in short supply for Indian, Eskimo, and Alaska natives in schools administered by the BIA, and Indian children in public schools, especially in *Arizona, Washington,* and *California;* for other children who come from homes where English is not spoken, such as large numbers of Orientals in *Hawaii, California,* and *Washington;* for Mexican-American children, present in large numbers in *Arizona, California, Washington,* and *Oregon;* and for children in *Guam* and the *Trust Territory of the Pacific Islands,* most of whom do not speak English as a first language. Most of the Indian children in BIA schools and in Guam, Hawaii, and the Trust Territory of the Pacific Islands suffer from a severe degree of social and cultural isolation. The Title II coordinator of Hawaii, for example, writes that world problems and space exploration create a need for resources that can help local children visualize the areas beyond their horizons. Many such a child has never been off the island where he was born, and he needs media experiences to understand the vastness of great land masses and the space beyond his limited viewpoint. Materials for teaching cultural heritage of such, as well as of Negroes, and for intercultural understanding, are very scarce and not always of good quality.

Summary

During fiscal year 1969, public and private elementary and secondary schoolchildren and teachers in the 50 States, the District of Columbia, Guam, Puerto Rico, the Trust Territory of the Pacific Islands, the Virgin Islands, and under the jurisdiction of the Department of the Interior (for children

and teachers in elementary and secondary schools operated for Indian children) participated in the ESEA Title II program for the improvement of educational quality through improved resources. Of the $50,000,000 available in fiscal 1969 (as compared with $99,234,000 in fiscal year 1968) $49,100,000 was used, or over 98 percent of the amount available.

The history of State administration of the title II program is one of relatively small outlays for State administration, with efforts to utilize funds as much as possible for the acquisition of materials for use in instructional programs. State departments of education spent less in the management of the title II program in fiscal year 1969 while striving, in the face of the reduced appropriation, to keep the administrative and supervisory staff assigned to the program.

Of the $46.15 million spent for acquisitions, $40.65 million went for school library resources—books, periodicals, documents, pamphlets, photographs, reproductions, pictorial or graphic works, musical scores, maps, charts, globes, and sound recordings, including but not limited to those on disc or tape; processed slides, transparencies, films, filmstrips, kinescopes, and video tapes, or any other printed and published or audiovisual material of a similar nature which are processed and organized for the use of elementary and secondary school pupils and teachers. Other instructional materials—these same resources but not processed and organized—took $2.2 million. Textbooks, bought for use in 19 States, Puerto Rico, and the Trust Territory of the Pacific Islands, accounted for only about one percent of the outlay—$737,286. Ordering, processing, cataloging, and delivering the materials cost about $2.2 million. State administrative expenses—fixed by law at 5% of the State's allotment or $50,000, whichever is greater—accounted for $3 million.

The Future of Title II

The Advisory Council on State Departments of Education notes the substantial progress made in elementary and secondary education by reason of the ESEA Title II program, and endorses all efforts to maintain and enlarge it. It notes the comments of the chairman of the Senate Appropriations Subcommittee, Senator Magnuson, in the floor discussion February 27, 1970:

> The lack of library resources in elementary schools, junior high schools, and secondary schools is critical. All statistics show that this is one of the most important programs we have. . . . This program, even now with this small amount, serves over 40 million children. . . .

The Council is therefore highly gratified with this relevant portion of the President's Education Message to the Congress, March 3, 1970:

> In September, the Nation's chief education officer, Dr. James E. Allen, Jr., proclaimed the Right to Read as a goal for the 1970s. I endorse this goal. . . .
>
> In some critical areas, we already know how to work toward achieving the Right to Read for our Nation's children. In the coming year I will ask the Congress to appropriate substantial resources for two programs that can most readily serve to achieve this new commitment—the program that assists school libraries to obtain books, and the program that provides funds through the States for special education improvement projects. . . .
>
> I shall direct the Commissioner of Education to work with State and local officials to assist them in using these programs to teach children to read. This is a purpose which I believe to be of the very highest priority for our schools, and a right which, with the cooperation of the Nation's educators, can be achieved for every young American.

Table 6 shows the fiscal 1969 funds available to the States, and their expenditures for administration and for acquisition and processing of materials.

Table 6.—Funds Available and Funds Expended for State Administration and Acquisitions, Under Elementary and Secondary Education Act, Title II Programs, Fiscal Year 1969

State or Other Area by Region	Allotment	EXPENDITURES						
		State Administration	School Library Resources	Textbooks	Other Inst. Materials	Ordering Processing	Total Acquisitions	Total Expenditure
1	2	3	4	5	6	7	8	9
Totals	$50,000,000	$3,035,422	$40,658,520	$737,286	$2,212,541	$2,544,837	$46,153,184	$49,188,606
Alabama	840,259	49,892	702,683	2,693	60,488	16,782	782,646	832,538
Alaska	66,568	9,539	29,938	—	27,065	—	57,003	66,572
American Samoa	30,000	[2]	[2]	[2]	[2]	[2]	[2]	[2]
Arizona	453,532	49,929	338,091	—	25,141	2,019	365,251	415,180
Arkansas	453,532	48,487	403,959	—	—	—	403,959	452,446
Bur. of Ind. Affairs	72,945	—	70,283	—	1,502	610	72,395	72,395
California	4,786,011	215,938	3,921,124	—	—	639,211	4,560,335	4,776,273
Colorado	541,044	37,567	342,946	—	124,610	33,193	500,749	538,316
Connecticut	717,932	47,648	644,946	—	—	18,494	663,440	711,088
Delaware	134,057	47,273	80,541	—	208	10,712	91,461	138,734
Dist. of Col.	167,514	26,604	88,611	—	47,653	5,395	141,659	168,263
Florida	1,358,173	64,675	988,004	737	148,202	74,682	1,211,625	1,276,300
Georgia	1,089,383	49,468	930,821	30,415	5,573	70,223	1,037,032	1,086,500
Hawaii	193,833	32,619	129,742	—	—	25,491	155,233	187,852
Idaho	180,728	39,377	107,132	—	31,005	2,941	141,078	180,455
Illinois	2,681,475	123,349	2,435,716	—	52,789	65,729	2,554,234	2,677,583
Indiana	1,286,642	39,055	1,090,948	—	49,230	84,763	1,224,941	1,263,996
Iowa	722,942	50,000	625,090	—	—	47,852	672,942	722,942
Kansas	556,782	50,000	472,077	—	—	34,648	506,725	556,725
Kentucky	759,127	45,797	502,782	41,242	15,182	16,870	576,076	621,873
Louisiana	954,621	38,210	825,415	19,235	—	58,571	903,221	941,431
Maine	253,111	27,960	192,566	—	22,963	4,825	220,354	248,314
Maryland	936,620	46,172	818,317	—	2,066	64,543	884,836	931,008
Massachusetts	1,296,227	68,007	998,769	—	136,918	74,191	1,209,878	1,277,885
Michigan	2,326,201	108,880	1,734,849	91,432	218,211	131,237	2,175,729	2,284,609
Minnesota	996,022	47,430	901,162	—	28,458	18,972	948,592	996,022
Mississippi	589,397	50,055	564,450	—	—	23,654	538,104	588,159
Missouri	1,144,401	45,933	1,035,363	468	3,212	50,863	1,089,906	1,135,839
Montana	185,736	49,547	134,311	—	1,320	—	135,631	185,178
Nebraska	374,367	86,367	253,428	—	6,127	25,960	285,515	286,886
Nevada	113,689	16,299	90,312	—	—	4,313	94,625	110,924
New Hampshire	168,878	18,264	122,757	500	17,419	7,971	148,647	166,911
New Jersey	1,652,599	79,821	1,579,134	—	—	17,798	1,596,932	1,676,753
New Mexico	288,109	45,550	180,144	3,513	51,051	1,968	236,676	282,226
New York	4,090,893	175,959	3,387,917	—	—	498,431	3,886,348	4,062,307
North Carolina	1,186,993	56,303	1,097,792	561	12,785	10,667	1,121,805	1,178,108
North Dakota	162,589	34,779	126,332	—	—	—	126,332	161,111

Ohio	2,361,889	130,638	2,406,250	32,722	53,026	36,636	2,528,634	2,659,272
Oklahoma	596,823	75,357	330,858	27,832	151,042	5,625	515,357	590,714
Oregon	485,416	47,440	390,218	—	3,942	43,795	437,955	485,395
Pennsylvania	2,767,349	188,395	2,225,308	63,240	232,186	108,221	2,628,955	2,817,350
Rhode Island	210,946	26,315	162,700	—	—	19,429	182,129	208,444
South Carolina	647,442	38,986	447,614	10,232	116,375	34,221	608,442	647,428
South Dakota	181,001	38,000	141,938	—	—	—	141,938	179,938
Tennessee	887,491	44,944	796,041	21,322	—	20,739	838,102	883,046
Texas	2,723,308	126,176	2,325,339	24,092	35,155	227	2,384,813	2,510,989
Trust Territory	44,184	—	14,720	19,824	4,943	3,735	43,222	43,222
Utah	296,752	51,026	209,285	3,626	—	—	212,911	263,937
Vermont	101,377	19,381	78,964	—	—	5,000	83,964	103,345
Virginia	1,017,993	23,749	972,808	—	—	24,682	997,490	1,021,239
Washington	819,428	49,835	698,520	—	31,971	38,937	769,428	819,263
West Virginia	420,151	48,784	326,013	2,982	33,524	6,334	368,853	417,637
Wisconsin	1,153,770	57,460	802,083	10,672	261,939	21,939	1,096,633	1,154,093
Wyoming	87,394	14,665	60,379	—	6,547	1,680	68,606	83,271
Guam	34,595	1,498	26,795	—	1,574	4,728	33,097	34,595
Virgin Islands	30,000	[1]	[1]	[1]	[1]	[1]	[1]	[1]

[1] Data not available.
[2] American Samoa did not participate in ESEA Title II.

Strengthening Instruction in Science, Mathematics, Foreign Languages, and the Humanities and Arts

(National Defense Education Act of 1958 as amended, Title III)

Fiscal year 1969 was the eleventh year in which the Title III, National Defense Education Act (NDEA), program supported the improvement of instruction through the purchase of equipment and materials and minor remodeling and through State supervisory and related services. The program has experienced considerable growth, the number of eligible subjects increasing from three to 11 (including arts and humanities). Appropriations for equipment and minor remodeling increased from $49,280,000 in 1959 to $75,740,000 in 1969; for supervisory and related services, from $1,350,000 in 1959 to $7,500,000 in 1967, the last year in which they were separately appropriated. Beginning in 1968, funds totaling $5,500,000 for supervisory and related services were deleted from the NDEA Title III appropriation and added to that of ESEA Title V (grants to strengthen State educational agencies). (Administration of NDEA Title III continued to be funded through an appropriation of $2,000,000 in fiscal years 1968 and 1969.) Although funding for supervisory and related services was shifted, many States continue to report these activities in their NDEA Title III annual reports.

The number of State agency professional staff positions currently performing services directly relating to the promotion, maintenance, and improvement of instruction in the critical subjects does not appear to have been substantially reduced since the change in funding procedures, but not all States are reporting consistently. What does appear evident is that the State Title III Coordinators along with the subject matter consultants supported through Title V, ESEA funds, have afforded continual curriculum stimulation and improvement.

States employ a variety of means for providing assistance to local educational agencies with project development, such as the services provided by the:

State or regional Federal Programs Coordinator.
State NDEA Title III Coordinator.
Critical-subject-matter specialists.
General program consultants and supervisors.

These specialists bring about the development of more viable and meaningful projects in the local districts by visits to schools and areas or by State workshops.

NDEA activity in curriculum development and revision is highlighted by the approval in one State of 334 projects involving 460 specialists in 1,258 consultant days. In part, these projects provided 24,303 teachers and 3,671 administrators and supervisors the opportunity to participate actively in various workshops. Disciplines that received the largest participation were: reading, with 45 projects involving 216 participant days; English: 68 projects and 212 days; English as a second language: 2 projects and 179½ days; science: 56 projects and 174 days; mathematics: 19 projects and 57 days; modern foreign languages: 23 projects and 66 days; and combinations of economics, geography, social science, civics, English, reading, and history: 97 projects and 310 days.

One statewide conference which brought together State and local administrators, supervisors, elementary and secondary teachers, professors of English, and members of the State department, demonstrated the need for concerted action in revitalizing the English programs. *Individualization of Learning K–12* was the theme of another weeklong workshop where State consultants in mathematics, English, science, and social studies

assisted some 177 teacher participants in these fields.

One State reported that its large number of State supervisory and curriculum specialists have created a strong interest in the inservice program and an active participation in the many activities they sponsored. The programs have instilled in the teachers of the State a desire to improve themselves academically; and this has created a need for additional equipment and materials purchased through the acquisition program. Evidence in another State: attendance by some 600 teachers at a workshop held on a university campus demonstrated a great interest in computers. Some 6,000 elementary teachers were involved in State-sponsored inservice training in new curriculum and technological developments in the physical and biological sciences; equipment and materials were purchased to implement these programs. As a result of State-sponsored institutes, many districts in that State are beginning to formulate objectives in terms of measurable changes in student behavior; measurements of influence on these changes will become possible.

A bulletin, *Leadership in Industrial Arts Education—School District Level*, was prepared by a State supervisor of industrial arts to assist local districts in determining duties and responsibilities of industrial arts supervisors and department heads. Title III, NDEA funds made possible for the first time a curriculum guide, *A Design for an English Curriculum*, which the State's curriculum supervisors noted was beginning, through extensive dissemination, to bring about a reorganization of the English curriculum from prekindergarten through the graduate level. Still another State's efforts in the field of curriculum guide preparation and dissemination resulted in the publication of *Some Criteria for Evaluating the Learning Possibilities in the Reading Program* and a how-to-do-it bulletin *Children Publish Their Own Books*. In addition to the publication of State-level guidelines and materials, most State departments of education make available the time of their consultants and subject matter specialists to local school districts to formulate and publish their own curriculum guides.

Priorities

Section 303(a)(2) of the National Defense Education Act of 1958, and the Title III Regulations, require the State plan to develop principles for determining the priority of projects to be approved in the order determined by the application of such principles, which should reflect the State's consideration of:

The State's educational goals.

The total general educational need in the critical subjects under Title III.

Special instructional needs which Title III may serve in a State.

The special requirements for equipment and facilities in each of the critical subject fields and the grade levels to be served.

The categories of eligible equipment, materials, and type of minor remodeling allowable and the State standards developed to enhance instructional programs.

Annual reports submitted by participating States and territories for fiscal year 1969 indicated that fifteen States identified general priorities, 21 States listed specific priorities, and 14 made little or no reference to priorities.

Priorities common to many States were directed toward basic educational needs in the critical subject areas and to the educational districts in greatest need.

Specific priorities selected from several State reports include the following kinds:

Basic educational need in the specific subject area.

Degree to which description of present program provides an understanding of existing instructional organizational procedures.

Evidence of long-range planning as it supports an improved instructional program.

Enrichment activities.

Evidence that recent local efforts have been made to strengthen the schools' total instructional program.

Purchase of equipment and materials which contribute to individualizing instruction.

Degree to which the cost of the project is reasonable in relation to potential improvement of instruction and number of students and teachers affected.

Plans for evaluation and followup provision of proposed program.

Financial need of the school district.

Projects which meet the needs of special groups of students, such as retarded, culturally disadvantaged, physically handicapped, and economically handicapped.

Materials for use in preschool and kindergarten programs where they are an integral part of the elementary school.

States listing specific priorities do not represent a particular geographical region, but are scattered across the country. Neither can the establishment of priorities be attributed to States on the basis of size or wealth. The priorities were applicable to students in elementary and secondary schools located in both urban and rural areas.

Coordination with other Federal Programs

Without exception all reports indicated coordination of NDEA Title III with other Federal programs. About half made general statements that this coordination was occurring; the other half cited specific kinds of cooperative efforts, such as:

Purchase of projection equipment under NDEA Title III to enhance film library services supported under ESEA Titles II and III.

Use of instructional equipment and materials provided under NDEA Title III and ESEA Title II for compensatory programs staffed by ESEA Title I. Testing was sometimes provided by NDEA Title V–A.

Joint staffing of project development workshops by State NDEA and ESEA personnel.

Provision of equipment component from NDEA Title III in schools or classes for handicapped students supported by ESEA Title VI.

Similar provision of equipment components partly or totally supplied by NDEA Title III for innovative programs supported by ESEA Title III.

The following frequency table represents the number of reports making specific reference to a particular program being coordinated with NDEA Title III:

Program	*No. of reports*
ESEA Title I	43
ESEA Title II	41
ESEA Title III	28
ESEA Title VI	3
NDEA Title V–A	4

Some States indicated active encouragement of such coordination; a few indicated they are requiring long-range plans outlining the anticipated uses of several Federal programs over several years' time. One State gave priority to projects combining materials from ESEA Title II and equipment from NDEA Title III. A substantial number reported that specialists assisted in developing, reviewing, and monitoring projects regardless of their source of funding. Many reported that several Federal programs were often coordinated at both the local and State levels by one person, thus achieving a better structure for cooperation.

Adequacy of Equipment and Reimbursement

NDEA Title III authorizes States to use their Federal allotment to pay up to 50 per-

cent of the cost of approved projects carried out by local educational agencies.

Thirty-seven of 48 reporting States applied a 50 percent matching formula. Reimbursement in some of these instances was 50 percent on expenditures of $1 per pupil in average daily attendance, with additional reimbursement on expenditures above that if funds were available. Ten States reported use of a variable formula based on education tax rates, assessed valuation per pupil, or economic need. Some States had an equalization formula for the sum total of school financing, which in certain cases provided indirect variable reimbursement for NDEA Title III projects.

In one State there were more than 100 nonparticipating school districts, all with low enrollments, because the per capita distribution formula resulted in such small amounts that it was not worth the effort to complete application forms. Because these are the schools most in need of equipment, the State is considering altering its distribution formula. If it is feasible, the State expects to establish a base allotment of about $1,000 matching funds for each school district; the remaining money will then be available for reimbursement on an enrollment basis and for special projects.

Late and inadequate funding were blamed in several reports for inability to reimburse up to 50 percent. One State showed a drop from 50 percent reimbursement during the fiscal years 1958–1966 to 42.9 percent in 1967, 40.5 percent in 1968, and 30 percent in 1969. Tardiness and insufficiency influenced many States to limit applications through strict priorities. A number of local education agencies were forced by the delay to spend part of their matching funds for other purposes. The result in some cases was inadequate planning of projects and the inability of some States to use their total allotment of Federal funds. Table 7 shows the additional funds States estimated they could have used for approvable projects, given matching funds and timely funding.

In spite of definite advances in the eleven years of the NDEA Title III program, most of the States seemed to feel that the attainment of a high degree of adequacy, either in quality or quantity of equipment and materials, was a will-o'-the-wisp. Each State had its own standards for interpreting "adequacy." Many were primarily concerned with

Table 7.—**Estimated Additional Funds Needed by State Departments of Education for Approvable Projects Under Title III, National Defense Education Act, and Section 12, National Foundation on the Arts and the Humanities Act, Fiscal Year 1969**

State	Amounts in Thousands	% of Allotment
Total	$70,784	89.8
Alabama	250	13.3
Alaska	23	21.9
Arkansas	90	9.1
California	7,334	138.2
Delaware	90	54.5
District of Columbia	529	300.5
Florida	629	27.7
Georgia	500	22.5
Hawaii	963	322.1
Idaho	50	14.0
Illinois	6,135	199.9
Indiana	5,818	300.0
Iowa	699	62.8
Kansas	1,787	199.8
Kentucky	350	22.3
Maine	86	19.7
Maryland	2,500	191.6
Massachusetts	125	8.0
Michigan	5,100	149.9
Minnesota	3,108	200.0
Missouri	3,293	200.0
Montana	100	29.9
Nebraska	206	35.7
Nevada	23	20.2
New Hampshire	300	116.3
New Jersey	70	3.9
New York	5,500	131.8
North Dakota	107	32.4
Ohio	5,000	123.0
Oklahoma	2,056	200.0
Oregon	1,600	215.9
Pennsylvania	1,000	25.2
Rhode Island	92	32.6
South Carolina	300	21.0
South Dakota	600	170.9
Tennessee	500	26.8
Texas	8,000	158.3
Vermont	79	42.2
Virginia	1,050	53.8
Washington	2,210	200.0
West Virginia	32	3.6
Wisconsin	1,500	87.2
Puerto Rico	1,000	94.6

quality, others with quantity, of equipment and materials. A few reports mentioned *Standards for School Media Programs*, developed jointly by the Department of Audio-Visual Instruction (of the National Education Association) and the American Association of School Librarians. Others used *Audio-Visual Quantitative Standards*, the Fullerton (Oklahoma) instrument, or the *Educational Communications Handbook* of the New York State Education Department.

Definitions notwithstanding, the needs were continuous and growing larger and more unattainable. The reasons included higher costs of purchases, increased enrollments, new accreditation standards, recent additions of subject areas to the program, obsolescence of equipment and materials, rapid advances in technology, social changes, and the pressing needs of special groups. The most prominent cause listed was the demand made by new methods of instruction, such as the laboratory or inquiry method, the individual and small-group approach, flexible and modular scheduling, team teaching, nongraded and continuous progress programs, and the increasing emphasis on library resource centers.

The degree of adequacy varied from district to district within each State, but in general the reports indicated that secondary schools were usually better equipped than elementary, and middle schools and junior high schools less well equipped than higher levels. Some States were certain that the use of sophisticated items was in direct ratio to the ability of their teachers to recognize the need and use of these items. In such cases, schools which were the best equipped were constantly asking for more than less well equipped institutions. Some reports went so far as to say that secondary schools fared better largely because their teachers were more knowledgeable about equipment and materials in relation to modern pedagogy than were teachers in the elementary schools. Most of the reports indicated that large urban districts were usually better supplied than small rural ones (except for densely populated areas with special problems). Poor districts, large and small, were less able than others to participate in the program in States which did not use an equalization or variable formula for matching funds.

The consensus was that the multimedia approach was necessary for all subject areas and that the major deficiencies were in audiovisual equipment and materials. The next largest need was in supplementary printed materials. Many reports stated that more materials should be moved to classrooms from libraries, but they were also in favor of centers for audiovisual equipment, film, filmstrips, tapes, records, books, and teaching machines. In many schools materials were insufficient for maximum use of existing equipment. There was also a great need for equipment and materials which would provide individualized instruction in all courses, as well as serve special groups such as the disadvantaged and underachievers. The demand was growing for educational television, dial-access retrieval systems, and computers to assist instruction in science, mathematics, languages, and social studies. Programed learning kits and study kits were lacking. Teachers needed more professional materials, and students needed more supplementary and reference works. For all courses there was an endless need for audiovisual equipment and materials, such as projectors of all kinds, films, film strips, and film loops; microfilm; microfilm viewers and printers; videotape recorders; audio- and videotapes; and supplies for making instructional materials.

Although the bulk of the NDEA Title III funds had been spent for years on science, there was still a great need for flexible laboratories, especially in junior high schools, for experimental and demonstration equipment, and for materials for student involvement. A number of schools even lacked basic laboratory facilities with running water. Many laboratories were short of microscopes, science kits, glassware, charts, and models. There were rising demands for nuclear science laboratories, planetariums, and observatories. In both science and mathematics, new courses required new items, such as the Engineering Concepts Curriculum Project

(ECCP) using computer logic boards and other electronic aids. Laboratories for mathematics were still uncommon. There were pressing needs for models, games, puzzles, calculators, manipulative items, and other learning devices, especially for slow learners. The downward shift of mathematical content from the high school to elementary grades increased the shortages at the lower levels.

In foreign language instruction the greatest lack was in equipment and materials for self-instruction which allowed use of slides, filmstrips, and sound films. Diverse supplementary items were needed, including periodicals, supplementary readers, cultural studies, foreign language periodicals, and reference works.

Purchases for history, civics, and geography were more abundant than for economics. Dependence upon one medium, such as an overhead projector or films, had to give way to the multimedia approach to aid inquiry skills. The rapidly changing requirements of the social studies found schools caught suddenly with outdated books, shortages of current professional materials, and few original source materials for instruction by the inductive method. New subject matter required such items as aerospace and celestial charts and materials with ethnic or racial content.

Although expenditures for English and reading were, in many cases, next to those for science, there were still great shortages because of the need to consider individual and group differences. Many reference volumes and supplementary reading books were outdated. Multilevel and enrichment materials, items for the teaching of the humanities and honors courses, and supplies for students to make their own books were limited. Listening centers, carrels equipped for individualized instruction, controlled readers, and individualized learning kits were needed. Teachers were asking for English centers for references, texts, sample curriculums, and equipment for program development. The most common need was classroom libraries, especially with varied materials, including paperbacks. These could be augmented by microfilm readers and printers to make use of the collections in school libraries.

Industrial arts, the last subject area added to the NDEA Title III program, had hardly begun to benefit. Many schools were still unable to move away from the old woodworking courses into the rapidly expanding world of new technologies. Serious shortages existed in all areas: equipment for electricity and electronics, graphic arts, metal and plastics industries, and industrial crafts like drafting and automotive and power mechanics.

Evidence of Improved Instruction

Nevertheless, all States agreed that instruction in the critical subjects continued to improve as a result of NDEA Title III funds. Typical comments:

> The cumulative effect of this aid has been to upgrade the general level of instruction in schools, large and small, by providing equipment and materials designed to improve the teacher's role in instruction.
>
> We have observed a dramatic transition from the earlier teacher-dominated lectures and demonstrations toward programs featuring students as active participants and investigators.

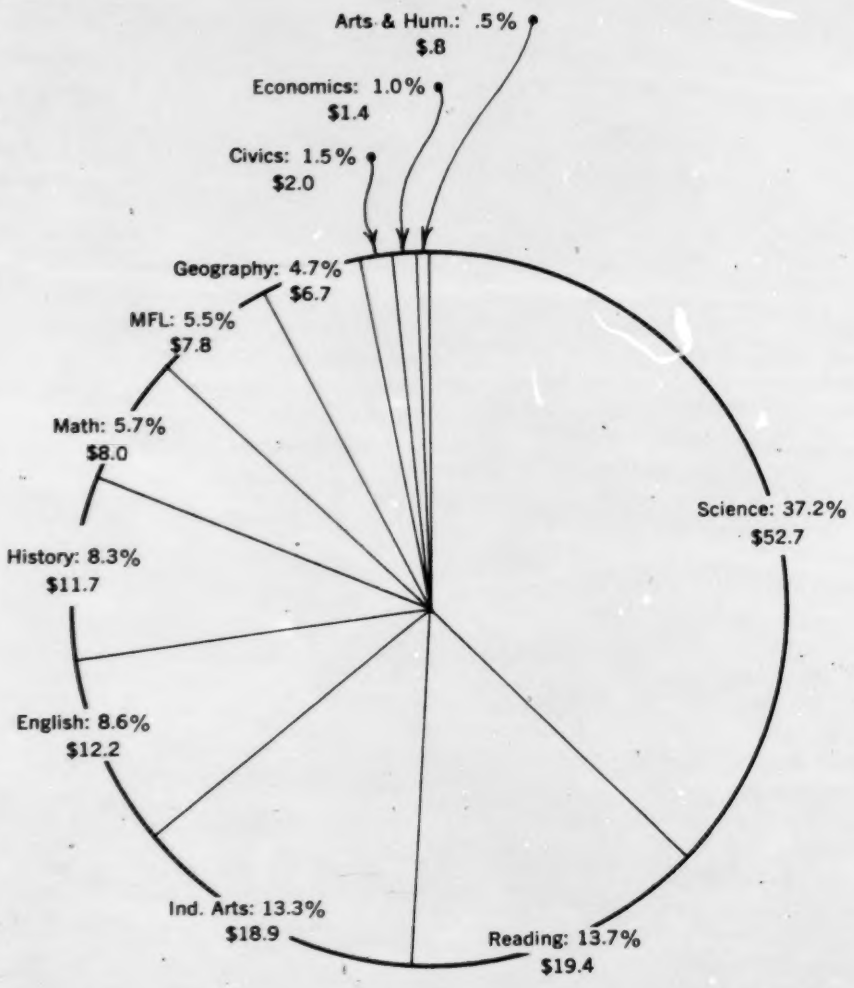
Evidence of improved instruction reported by States is summarized in four categories:

1. Improved instructional patterns and teaching techniques;
2. Innovative school organizational patterns;
3. Improvement and extension of curriculum; and
4. Student achievement.

Improved Instructional Patterns and Teaching Techniques

States reported that the availability of additional materials and equipment had contributed significantly to the employment of more effective instructional patterns and teaching techniques. All States indicated that

Figure 2—National Defense Education Act, Title III, and National Foundation on the Arts and the Humanities Act, Section 12, Dollar Amount and Percentage of Total Expended by Subject Area, Fiscal Year 1969



TOTAL: $141.6 (Federal Share: 50%)
($ in Millions)

increased attention was being directed toward individualization of instruction. In fact, it appears that present trends toward more individualized instruction emphasize both learning rate in keeping with the individual's capabilities and the pacing of the selection of content or of learning experiences to meet more nearly the unique needs of children and youth.

Frequently mentioned instructional patterns which were among the more effective include the following:

Teacher's experimentation with a variety of approaches to help individual learners;

Individual and small instructional groups for a precise teaching purpose;

Teacher-pupil conferences;

Small-group committee work;

Arranging for multimedia approaches to learning;

Encouraging and arranging for individual study, experimentation, and research.

Improved teaching techniques mentioned most frequently are related to teachers' efforts to help learners develop concepts, contemplate, arrive at generalizations, and apply new knowledge to different problematic situations rather than merely recall information. Mentioned frequently were teaching techniques which provided for guided self-discovery; for inquiry-learning; for independent exploration, study, and research; for self-diagnosis of learning "gaps"; and for raising problems and testing hypotheses.

Several exemplary undertakings illustrate these techniques. An experimental project designed to test the use and effectiveness of tape-recorders, listening-viewing centers, and individual filmstrip projectors for improving instruction in English and reading was conducted in an elementary school, grades K–8. Thirteen classrooms representing all grade levels were selected. With assistance from local and State consultants, teachers planned activities which were most appropriate to individual needs of children. They selected films, tapes, records, and books which represented a wide range of literature, including folklore, fairy tales, fables, poetry, plays, and stories; and a wide range of content information pertaining to the natural and physical sciences, to the various subjects included in the social studies curriculum, and to communication skills, including special filmstrips on basic reading skills.

Individual, small-group, and total-group activities were designed primarily to supplement and reinforce the language-experience approach to learning as well as to individualized instruction. Individual filmstrips were used frequently to stimulate writing, dramatizations, and story-telling. Capitalizing on various learning experiences and on the availability of equipment, children made their own sound tracks, developed tapes, and recorded songs, plays, and reports of various activities. Such equipment could be used effectively by elementary children, and the use of these instructional media contributed to the development of special individual competencies in reading and English for students involved. The State department recommended that other schools conduct similar projects to determine more effective ways of using these media in individualizing instruction. The State Reading Consultant is distributing a complete report of this project to local school districts.

Another project, serving 13 elementary city schools and designed primarily to improve reading and language competencies, was framed to provide the widest possible range of specialized materials and of differentiated approaches to learning. The key component was the implementation of a learning center, i.e., an instructional center which provided opportunity for teachers to pursue and to follow up the diagnoses of children's needs with specific instructional programs. The center also provided opportunity for each child to be actively involved in his own educational program through guided self-diagnostic and correctional activities, through self-selected activities which extended his information in the areas of science, geography, history, mathematics, and

literature, and through pursuit of his own special interests.

The instructional program was organized on both a formal and an informal schedule to accommodate children from all classes, either individually or in small instructional groups. In consultation with the classroom teacher and through diagnosis of children's particular educational needs and interests, the learning center personnel directed or supervised all activities while children were in the center. Hence, the center served an an instructional setting in remediation, as an enrichment center, and as a center for self-selected and self-directed study.

Innovations in School Organizational Patterns

Most States indicate that Title III NDEA funds continue to have a decided impact on changes made in school organizational patterns. Virtually every State referred to the implementation of team teaching. Repeated references were made to the establishment of various kinds of learning centers. Continued improvements have been made in equipping science, mathematics, and foreign language laboratories as well as in establishing electronically-equipped classrooms. Special rooms and laboratories, particularly at the elementary level, continue to be outfitted as resource centers in the arts, music, and critical subject areas which are supervised by teams of school personnel and which serve all children of the school or area. States report that museums, planetariums, greenhouses, and facilities for educational television have been developed by school districts, or cooperatively by two or more school districts in several instances, with the aid of NDEA funds.

Some examples illustrate these innovations:

- A pilot project initiated by a junior college provided a study skills and tutorial center for students deficient in reading, writing, and computing. The purpose was to help students acquire levels of performance that would give them a reasonable chance for success in college-level courses. Teachers along with paraprofessionals were available to the students on an individual basis in a concentrated tutorial structure. The center provided a wide range of equipment and materials, and offered the multimedia approach. The unification of basic courses of study enabled students to see the carryover effect from one subject to another. As a student gained competence in these basic skills, he was gradually assimilated into the regularly established junior college program. The State reported that this project was effective and that the plans were to continue the project.

- Cooperatively, six school administrative units within a county established an Educational Resource Center. Additional support came from local and State funds and from Titles I, II, and III ESEA. One of the center's primary features is a planetarium chamber completely equipped to project heavenly bodies on a dome 30 feet in diameter. The 74 reclining seats in the chamber can accommodate two classes at a time. Students are first oriented by the assistant director to the program they will see; he also gives additional instruction in space science. The presentation at the planetarium is "a laboratory experiment evolving from classroom study and a prescribed curriculum in space science and other related subjects." The Center also serves as a media warehouse from which various instructional materials are distributed to schools by truck. It contains a curriculum library, a demonstration classroom, adequate display areas, and work areas for teacher production of teaching materials. Facilities are available for laminating, dry mounting, picture lifting, darkroom production, transparency production, tape duplication, and videotape recording. The Center serves 26,500 children enrolled in 50 public schools and several private schools. It is administered by a nine-

member advisory committee consisting of professional personnel appointed by the boards of education of the six participating school units.

Curriculum Improvement and Extension

States agree that NDEA Title III funds continue to make a significant contribution to the improvement and expansion of curriculum in the critical subjects. Most States noted the continuous shift from traditional to newer curriculums developed by distinguished scientists and scholars, particularly in the areas on science and mathematics.

One State reported that some 6,000 of its elementary teachers received inservice training in the new curriculum developments in the physical and biological sciences and that equipment and materials had been purchased to implement those programs. Another reported that a large city school system had developed an approach to improving mathematics that provides an integrated system of instructional tools. In still another State 42 new mathematics courses were approved by the Department of Education during the year. Several schools in yet another State were experimenting with and adapting national social studies curriculum projects, but most schools were synthesizing State and national curriculum ideas through local workshops and university classes.

States indicated that increasingly more local school districts are conducting curriculum studies: One reported that 12 school districts were involved in K–12 curriculum studies during the year. Another wrote that more than 50 local school districts were engaged in curriculum study and revisions.

It is also evident that increased attention is being directed toward the expansion of industrial arts curriculums. The following typical statement is illustrative:

> In many of our schools the traditional woodworking and drafting programs have been expanded to include instruction in metalworking, electricity and electronics, and power mechanics.

Another State reported an increase of 16,523 students enrolled in industrial arts programs.

Practically every State reported improvements in reading and English programs. One reported that a Model English Program, based on a comprehensive curriculum design from prekindergarten to graduate level which had been developed under the State's leadership, had been established in 11 school systems. Special courses in bilingual programs and in teaching English to foreign-speaking students were noted by several States.

Many exemplary projects illustrating curriculum improvements and expansions can be cited. Initiated as a joint program by a Board of Cooperative Education Services, one project extended the science curriculum in schools. Objectives of the program included, among others, the following:

> To develop a sound program for the teaching of human sexuality and drug addiction;
>
> To provide a readily available supply of films and of filmstrips which relate specifically to human sexuality and to drug addiction;
>
> To develop more effective teaching techniques in these two areas; and
>
> To direct special emphasis to more effective ways of working with Black students in these critical areas.

Specific objectives of the project were to help students:

> Deal more effectively with the areas of knowledge and use of narcotics;
>
> Understand mental and physical growth changes;
>
> Understand their relations with their own sex and with the opposite sex; and
>
> Understand the area of human and animal reproduction.

The project was implemented by two teaching teams, each consisting of a science-oriented specialist, a school nurse, and a school psychologist, who worked closely with teachers. Among other things, the teams

served as special "helpers" to whom students could turn for assistance with problems relating to these areas. They worked with the local Parent-Teacher Association and with individual parents, frequently involving them in conferences for the purpose of resolving student problems, and in the evaluation of critically-related materials. Some 680 students were served by this program.

As another project, one city school system established a course of plastics, vacuum, and pressure-forming processes in 30 junior high schools. The course constituted the basis for an updated industrial arts program and provided students the opportunity for adequate exploratory experiences in plastics fabrication. Using a thermoforming vacuum-pressure process, students had the opportunity for creativity in designing and in preparing forms for plastics molding. Other equipment used in this project included overhead projectors, a copying machine, and equipment for bending plastic and for drying fiberglass.

Student Achievement

Almost all States reported that student achievement in the critical subjects has continued to improve. Some 25 States reported that students had made significant gains, according to standardized achievement tests, in at least one critical subject, and the majority of those States reported such gains in three or more subjects. One reported: "Achievement test results show that . . . students rate above the national norm in most subjects." In 10 States, higher education authorities reported that first year college courses could be taught on a higher sophisticated level because students were better prepared. Most frequently mentioned were courses in the sciences, mathematics, modern foreign languages, and English.

Almost all States reported observations of students' growth and development in such subjective areas as attitudes, values, appreciation, and human relations. Included among others were statements on improvements in personal development; in abilities for self-analysis and for self-evaluation; in personal relationships with peers; in abilities to explore, to inquire, and to experiment independently with self-confidence; in attitudinal changes; in interest in critical subjects and in school; and in creative abilities. Also noted were the development of deeper understanding of and appreciation for various art forms and music, and for different cultures and their contributions to society.

The general purpose of a demonstration reading program, initiated by a large city school system, was to develop individual potential to enable a youth to live satisfactorily, contribute to his life, and establish his educational goals. Three primary factors were explored in the development of human potential: (a) the young person's need to organize his inner experiences, (b) his ability to learn, and (c) his skill in communicating ideas to others. In the shaping of the educational program each youth was recognized as a unique individual, and his background, his home, his parents, his language, his skills, and his school experience were considered. The program was designed to enable students to reach reading goals in basic sight vocabulary, word attack skills, and comprehension skills. It was designed to develop in students an ability to select important ideas, reorganize ideas, and acquire efficiency in reading; and to induce a quest of knowledge through reading.

Reading improvement involved five different approaches: (a) parent counseling and instruction, (b) diagnostic and corrective reading, (c) extended reading instruction, (d) total skill involvement, and (e) reading instruction for bilingual students. The State reported that although several years of study and improvement would be required before the program reached its full potential, the program provides a framework around which schools can build successful reading programs for disadvantaged youth.

Another project, designed to provide a humanities-oriented curriculum for 108 heterogeneously grouped students, established a laboratory school within a regular high school. The course incorporated English, history, science, art, drama, and physical educa-

tion, and utilized the team teaching approach. Classes were held on a flexible basis starting midmorning and extending until late afternoon, with optional subjects available to students. The theme centered on man's search for freedom, man's search for truth, and man's adaptation to change. Highlights included integration and humanization of the curriculum; tutorial approach to instruction; development of a community awareness; appreciation of concerns and problems of peers; evaluation of programs and self; student participation in the establishment of curriculum and after-school programs. The State reported that this project was well received, judged successful in accomplishing objectives, and would be continued the next year.

Evaluation

NDEA Title III regulations require State educational agencies to conduct an administrative review and evaluation of the program to determine its status in terms of objectives. Among the 17 States thus far reporting reviews, surveys, and studies, the evaluations were conducted in a number of ways: some by State educational agency staff members themselves; some under contract by individuals, management consulting firms, and universities; and others by university students for their M.A. and Ph.D. dissertations. The nature and scope of the studies also differed. One investigator examined the State agency office that administered the program. Many considered the impact of the program on curriculum change; some reviewed developments in specific subject fields which resulted at least partly from NDEA Title III. Some samples of these studies:

- Davis, J. Clark and Trout, Len L., *A Study of the Bureau of National Defense Education Act Administration*, University of Nevada, Reno, 1968.
- Johnson, Donald W., *Impact of Title III NDEA Upon Selected California School Districts*, unpublished report to legislative analyst, California State Department of Education, 1969.
- Voege, Marie and Hampton, Jerry, *A Plan for the Development of an Evaluation Program for NDEA Title III Projects for the Department of Education*, Boothe Resources International, Inc., Sacramento, California, 1969.
- Young, Madge Arlene, *The Influences Affecting Curriculum Change in Selected Educational Agencies Employing Consultants in the Social Sciences Through NDEA Title III–B*, unpublished doctoral dissertation, University of the Pacific, Stockton, California, 1969.
- Director of Secondary Education and Coordinator of NDEA Title III, *National Defense Education Act Title III and Instructional Factors*, a chapter appearing in a doctoral dissertation, The American University, Washington, D.C.
- Zeiss, Donald V., *The Impact of NDEA Title III Funds on Science Programs in Selected Nebraska Public Schools*, unpublished Master's research paper, The University of Nebraska, Lincoln, 1969.
- Molstad, Arlene A., *Course Outline in the Basic Classroom Utilization of Audiovisual Materials*, research paper, North Dakota State University, Fargo, 1969.
- Oberlander, LeRoy A., *The Preparation and Professional Activity of Public Secondary Foreign Language Teachers in North Dakota*, independent study report, University of North Dakota, Grand Forks, 1968.
- Kinzie, Glenn, *Wisconsin Social Studies Program Survey.*
- Sanders, Norris, *Studies of Mathematics Achievement by Pupils and Attitudes of Pupils Toward Mathematics.*

Several States reported studies in greater detail. The following is a summary of the purposes, procedures, and findings of these studies:

- **Arizona**
  Procedures: An evaluation instrument in the area of educational media was applied to three of the larger projects in the State.

Findings: Acquisition of equipment and materials does not automatically guarantee a better quality of educational process and teaching techniques. Acquisition must be followed up with total involvement of staff and school district personnel.

- **California**

  Johnson, Donald W., *NDEA, Change Agent for Education: The First Ten Years, 1958–68*, unpublished, California State Department of Education, 1969.

  Purpose: More than 80% of the school districts in California, enrolling more than 90% of the students, have participated in the NDEA Title III program during its first 10 years. This study, the third of its kind in the State, is an expression of continuing concern for the quality of State department services and the effectiveness of the programs administered. The specific purpose of the study was to determine (1) the changes in programs assisted by NDEA Title III, (2) the relationship between a district's size, wealth, location, and type, and participation under NDEA Title III, and (3) the relationship between the value of time spent by participating teachers and principals in various subject areas and NDEA Title III.

  Procedures: Answers were obtained from curriculum supervisors in large California school districts, file data were analyzed, and structured interviews were conducted in 50 districts, selected with a stratified random sampling technique. Subjects investigated were science and English-reading at elementary and secondary levels.

  Findings: (1) More than half the science programs taught today are different from those taught ten years ago; (2) Title III of NDEA stimulates teachers and administrators to devote more time to the development and implementation of plans of educational improvement, there being a consistent, positive relationship between the value of such time and the recency of an approved project in the subject area; (3) School districts, in addition to matching the Federal funds used for the acquisition of equipment and materials, voluntarily allocated teacher and administrator time having a value twenty times greater than the Federal funds implementing plans for which the materials and equipment were acquired; (4) Findings of all three studies indicated that participation under Title III NDEA by school districts varied directly with the size of the district and inversely with its wealth. Geographical location appeared to have some effect. Although some districts reported difficulty in finding matching funds, participation decreased as the wealth of the district increased. For ten years, in California at least, NDEA has not made the rich richer; and (5) In a sense this study has program budgeting in retrospect. Its scope supports the belief that program budgeting can and will be successfully used as a tool for educational improvement.

- **Florida**

  A survey of participants in the acquisition program as to its effectiveness for strengthening teaching in the eligible subject areas yielded a mean rating of 3.6 on a five-point scale ("1" was lowest level of improvement and "5" highest level.) Three-fifths of the responses fell above the midpoint on the scale.

- **Georgia**

  A science study showed that acquisition of equipment and materials does not *per se* improve science teaching. Concerted effort must be mustered to improve the quality and quantity of science teachers who can then make intelligent selection of science equipment, and once it is acquired, use it in such manner as to stimulate the interest of learners.

- **Kentucky**

  In a subjective evaluation, 53.5 percent of the school districts reporting rated the program "excellent"; 39.4 percent

"very good"; 4.7 percent "good"; 1.2 percent "fair"; and 1.3 percent "poor."

- **New Jersey**

Purpose: An effort was made by the State NDEA staff to evaluate the impact of Title III since its inception.

Procedures: A survey, calling for both objective and subjective responses in all critical subject areas at elementary and secondary levels, was submitted to participating school districts.

Findings: Responses indicated that NDEA III has been helpful in eliminating shortages of materials and equipment but is still needed in *all* subject areas. It has been a good program in motivating local effort for educational expenditures. It was believed that NDEA III helped students attain a higher level of achievement in critical subjects, indicated by higher scores on standardized tests, more advanced courses and greater enrollment in them, and advanced placement in college.

- **Pennsylvania**

Evaluation of NDEA Title III Programs in Pennsylvania, 1968–69, Division of School Evaluation, Pennsylvania Department of Education, Harrisburg, 1969.

Purpose: To collect data on five areas judged related to improvement of instruction: (1) strengthening of subject matter programs; (2) offering of new or additional programs to the curriculum; (3) increasing of supervisory services; (4) initiation and/or introduction of new instructional methods; and (5) improvement of curriculum through supplementary reading, multitexts, and professional libraries.

Procedures: Forms were sent to 100 school districts representing 54 counties in Pennsylvania. Elementary and secondary schools participating in the survey were selected on the basis of a total NDEA Title III expenditure of $1,500 combined funds in one or more subject areas. There was 100 percent participation.

Findings: (1) For the most part, Title III funds have been used by schools to strengthen their programs, add new curriculums, provide additional supervisory services, implement new instructional methods, and provide supplementary reading materials for pupils and teachers; (2) Secondary schools have utilized NDEA Title III funds more extensively than elementary schools; (3) At the elementary level science, mathematics, reading, history, and geography are the areas most affected; (4) At the secondary level the most affected areas are science, mathematics, modern foreign language, English, and history; and (5) The program should be continued and expanded.

Additional projects amounting to over a million dollars were requested but not approved during fiscal year 1969 because of lack of funds.

- **Wisconsin**

Kahl, William C., *Evaluation Survey, NDEA Title III*, Wisconsin Department of Public Instruction, Madison, 1969.

Purpose: The survey was conducted to ascertain the extent to which NDEA Title III has affected instructional programs in the critical subjects and to serve as a tool in making decisions concerning the future course of NDEA Title III.

Procedures: During 1968 a survey of all LEAs was conducted and a summary published in the March 1969 issue of *The Superintendent's Newsletter*. The current survey was a followup conducted by means of a random sample of 20 percent of the school districts in the State. Eighty-three percent of the selected districts responded.

Findings: (1) Administrators indicated that Title III has changed the stated goals of their educational programs, thus proving to be more of a change agent

than was first suspected; (2) There was a direct relationship between the credited impact of Title III on the achievement of stated instructional goals and the degree of teacher involvement in the development of local NDEA plans and lists of acquisitions; (3) Administrators indicated a balance of needs among in-service education, acquisition of equipment, and acquisition of materials when ranking them as future educational needs of their school systems; and (4) Further consideration should be given to the concept of special projects to complement the basic NDEA Title III acquisition program.

Loans to Private Nonprofit Elementary and Secondary Schools

Loans to nonprofit private schools under NDEA Title III are administered directly by the U.S. Office of Education (though States are envincing increased interest in and responsibility for instruction and services in these schools).

During fiscal year 1969, 15 loans were approved for 14 elementary and secondary schools in 11 States, and one in Puerto Rico. The total amount approved was $371,520, as shown in Table 8, which includes NDEA funds of $311,520, and $60,000 in NFAHA funds. More than 96,000 elementary and secondary students benefited from these loans.

Loans were made for the acquisition of equipment and instructional materials and for minor remodeling in the areas of science, mathematics, modern foreign language, history, geography, civics, English, reading, and economics. They were used in these areas to the extent shown in Table 9. A total of $5,105 was approved for audiovisual equipment and materials which represented 1.4 percent.

Many schools in the Archdiocese of Milwaukee benefited from a loan of $111,630 for educational television equipment for science, modern foreign languages, history, geography, civics, English and reading, which would expand an existing network of closed-circuit television already in use for instructional purposes in 175 other schools within the Archdiocese. The National Academy of Ballet in New York City received a loan of $60,000, the full allotment available for loans under NFAHA. The funds were used for minor remodeling of the music, dance and drama rooms.

Table 8.—Loans to Private Schools Under Title III, National Defense Education Act, and Section 12, National Foundation on the Arts and the Humanities Act, Fiscal Year 1969

State	City	School (15 loans—14 schools)	Combined Totals $371,520 [a]
CALIFORNIA	Palo Alto	Palo Alto Military Academy	$ 2,630
COLORADO	Denver	Yeshiva Toras Chaim	3,900
FLORIDA	Sanford	The Sanford Naval Academy	1,200
ILLINOIS	Chicago	St. Clotilde Catholic School	2,460
MARYLAND	Rockville	Harker Preparatory School	12,890
MICHIGAN	Bloomfield Hills	Roeper City and Country School	5,900
MINNESOTA	Fridley	Archbishop Grace High School	11,500
NEW HAMPSHIRE	Enfield	La Salette Seminary	2,970
NEW YORK	New York	National Academy of Ballet	151,200 [b]
PUERTO RICO	Rio Piedras	Academia Maria Reina	35,600
	Rio Piedras	Baldwin School of Puerto Rico	8,800
	Humacao	Colegio San Antonio Abad	16,040
TEXAS	Houston	St. Thomas High School	4,800
WISCONSIN	Milwaukee	Archdiocese of Milwaukee	111,630

[a] The total from NFAHA funds was $60,000; the total from NDEA funds was $311,520.
[b] Of this amount, $60,000 was from NFAHA funds.

Table 9.—Use of Loans Under Title III, National Defense Education Act, and Section 12, National Foundation on the Arts and the Humanities Act, by Subject Areas, Fiscal Year 1969

Subject	Amount	Percentage of Total
Science	$104,983	35.2
Modern Foreign Languages	48,494	13.7
Geography	25,891	7.2
Reading	25,382	7.1
English	24,750	6.9
History	24,555	7.9
Mathematics	23,381	12.2
Civics	22,463	6.3
Economics	6,516	1.8
Total	$306,415	98.3

Summary

In general the State reports for NDEA Title III, fiscal year 1969, cited as major strengths of the program, the following:

- The concentration of funds to develop or improve elementary school media programs;
- Increased participation of nonpublic school children and teachers;
- An increasing awareness by administrators of the importance of quality instructional materials readily accessible.

The major weakness they found was the lack of sufficient qualified personnel at the local level.

Table 10.—National Defense Education Act, Title III and National Foundation on the Arts and the Humanities Act, Section 12, Sources of Funds and Percent of Total Expenditures Spent for Acquisition of Equipment and Materials and Minor Remodeling, Fiscal Year 1969

		Expenditures					
			Federal			State and Local	
State or Territory (1)	Allotment (2)	Total 4+7 (3)	Amount (4)	Percent of Allotment (5)	Percent of Total (6)	Amount (7)	Percent of Total (8)
Total	$75,680,000	$154,881,591*	$73,434,717	97.0	47.4	$79,982,027	51.7
Alabama	1,888,098	3,776,196	1,888,098	100.0	50.0	1,888,098	50.0
Alaska	106,156	257,084	105,542	99.4	41.1	151,542	58.9
Arizona	784,359	1,567,258	783,629	99.9	50.0	783,629	50.0
Arkansas	991,055	1,970,784	985,322	99.4	50.0	985,462	50.0
California	5,335,635	10,746,370	5,335,635	100.0	49.7	5,410,735	50.3
Colorado	806,722	1,648,443	806,722	100.0	48.9	841,721	51.1
Connecticut	724,973	1,222,300	611,151	84.3	50.0	611,149	50.0
Delaware	165,504	331,008	165,504	100.0	50.0	165,504	50.0
Dist. of Columbia	177,226	341,957	170,977	96.5	50.0	170,980	50.0
Florida	2,281,979	5,866,446	2,281,979	100.0	38.9	3,584,467	61.1
Georgia	2,239,316	4,476,214	2,238,107	99.9	50.0	2,118,107	47.3
Hawaii	301,047	979,391	301,047	100.0	30.7	678,344	69.3
Idaho	358,140	716,280	358,140	100.0	50.0	358,140	50.0
Illinois	3,085,357	7,078,723	3,085,357	100.0	43.6	3,993,366	56.4
Indiana	1,950,699	3,901,398	1,950,699	100.0	50.0	1,950,699	50.0
Iowa	1,119,359	2,639,614	1,118,378	99.9	42.4	1,521,236	57.6
Kansas	898,921	1,815,301	898,872	100.0	49.5	916,429	50.5
Kentucky	1,581,651	2,777,078	1,388,539	87.8	50.0	1,388,539	50.0
Louisiana	2,016,264	3,721,466	1,885,733	93.5	50.7	1,835,733	49.3
Maine	439,486	869,478	434,739	98.9	50.0	434,739	50.0
Maryland	1,312,943	2,586,326	1,293,163	98.5	50.0	1,238,464	47.9
Massachusetts	1,557,326	3,677,960	1,557,240	100.0	42.3	2,120,720	57.7
Michigan	3,421,788	9,289,657	3,421,788	100.0	36.8	5,867,869	63.2
Minnesota	1,563,031	3,166,806	1,562,856	100.0	49.4	1,603,950	50.6
Mississippi	1,320,102	2,224,798	1,112,376	84.3	50.0	862,881	38.8
Missouri	1,655,991	3,151,431	1,575,713	95.2	50.0	1,575,718	50.0
Montana	335,693	731,212	335,675	100.0	45.9	395,537	54.1
Nebraska	580,126	1,160,612	580,093	100.0	50.0	580,519	50.0
Nevada	114,394	207,544	103,757	90.7	50.0	103,787	50.0
New Hampshire	259,469	474,652	232,048	89.4	48.9	242,604	51.1

Table 10.—National Defense Education Act, Title III and National Foundation on the Arts and the Humanities Act, Section 12, Sources of Funds and Percent of Total Expenditures Spent for Acquisition of Equipment and Materials and Minor Remodeling, Fiscal Year 1969—Continued

State or Territory (1)	Allotment (2)	Expenditures					
			Federal			State and Local	
		Total 4+7 (3)	Amount (4)	Percent of Allotment (5)	Percent of Total (6)	Amount (7)	Percent of Total (8)
New Jersey	1,807,039	3,633,981	1,794,568	99.3	49.4	1,839,413	50.6
New Mexico	588,214	887,812	435,028	74.0	49.0	452,784	51.0
New York	4,198,623	8,319,727	4,159,864	99.1	50.0	4,159,863	50.0
North Carolina	2,543,076	5,060,024	2,530,012	99.5	50.0	2,448,633	48.4
North Dakota	331,874	753,283	331,874	100.0	44.1	421,409	55.9
Ohio	4,089,849	8,340,340	4,089,849	100.0	49.0	4,001,214	48.0
Oklahoma	1,034,408	2,108,077	1,026,879	99.3	48.7	1,081,198	51.3
Oregon	745,867	1,971,366	745,867	100.0	37.8	1,225,499	62.2
Pennsylvania	3,992,360	8,077,783	3,992,358	100.0	49.4	3,722,012	46.1
Rhode Island	283,347	612,286	283,347	100.0	46.3	328,939	53.7
South Carolina	1,435,659	2,871,324	1,435,659	100.0	50.0	1,183,665	41.2
South Dakota	353,360	493,902	246,951	70.0	50.0	246,951	50.0
Tennessee	1,880,219	3,597,696	1,798,848	95.7	50.0	1,704,310	47.4
Texas	5,083,507	9,362,622	4,681,311	92.1	50.0	4,681,311	50.0
Utah	562,511	1,084,234	542,117	96.4	50.0	542,117	50.0
Vermont	187,862	344,767	172,382	91.8	50.0	172,385	50.0
Virginia	1,960,992	3,603,647	1,790,515	91.3	49.7	1,813,132	50.3
Washington	1,111,709	2,238,033	1,111,600	100.0	49.7	1,126,433	50.3
West Virginia	897,323	1,858,072	896,910	99.9	48.3	961,162	51.7
Wisconsin	1,730,053	4,196,397	1,730,053	100.0	41.2	2,466,344	58.8
Wyoming	145,138	289,436	144,718	99.7	50.0	144,718	50.0
American Samoa	50,112						
Guam	50,289	98,530	49,265	98.0	50.0	49,265	50.0
Puerto Rico	1,066,111	1,551,520	775,054	72.7	50.0	776,466	50.0
Virgin Islands	50,185	102,136	50,000	99.6	49.0	52,136	51.0
Trust Territory of the Pacific Islands	50,370						
Bureau of Indian Affairs	77,133	50,809	50,809	65.9	100.0	—0—	0.0

* Includes $1,4[illegible]5,847 under Appalachian Regional Development Act distributed among 8 States.

Table 11.—National Defense Education Act, Title III, and National Foundation on the Arts and the Humanities Act, Section 12, Expenditures for Acquisition of Equipment and Materials and Minor Remodeling, from All Sources, Fiscal Year 1969

State	NDEA Title III			NFAHA Section 12			Grand Total of Expenditures (1+4)
	Total Expenditures (2+3)	Total Acquisition of Equip. & Materials	Total Minor Remodeling	Total Expenditures (5+6)	Total Acquisition of Equip. & Materials	Total Minor Remodeling	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Total	$154,018,863	$152,457,376	$1,561,487	$862,728	$861,768	$960	$154,881,591
Alabama	3,754,352	3,752,552	1,800	21,844	21,844	—	3,776,196
Alaska	257,084	255,984	1,100	—	—	—	257,084
Arizona	1,558,979	1,483,131	75,848	8,279	8,279	—	1,567,258
Arkansas	1,970,784	1,969,561	1,223	—	—	—	1,970,784
California	10,678,299	10,606,168	72,131	68,071	68,071	—	10,746,370
Colorado	1,639,103	1,639,103	—	9,340	9,340	—	1,648,443

Table 11.—National Defense Education Act, Title III, and National Foundation on the Arts and the Humanities Act, Section 12, Expenditures for Acquisition of Equipment and Materials and Minor Remodeling, from All Sources, Fiscal Year 1969—Continued

State	NDEA Title III			NFAHA Section 12			Grand Total of Expenditures (1+4)
	Total Expenditures (2+3)	Total Acquisition of Equip. & Materials	Total Minor Remodeling	Total Expenditures (5+6)	Total Acquisition of Equip. & Materials	Total Minor Remodeling	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Connecticut	1,214,677	1,214,677	—	7,623	7,623	—	1,222,300
Delaware	329,094	329,094	—	1,914	1,914	—	331,008
Dist. of Columbia	339,907	339,907	—	2,050	2,050	—	341,957
Florida	5,808,349	5,702,306	106,043	58,097	58,097	—	5,866,446
Georgia	4,451,326	4,448,766	2,560	24,888	24,888	—	4,476,214
Hawaii	962,820	962,820	—	16,571	16,571	—	979,391
Idaho	712,136	709,639	2,497	4,144	4,144	—	716,280
Illinois	7,021,447	6,560,252	461,195	57,276	57,276	—	7,078,723
Indiana	3,878,830	3,855,002	23,828	22,568	22,568	—	3,901,398
Iowa	2,628,627	2,628,627	—	10,987	10,987	—	2,639,614
Kansas	1,804,998	1,804,998	—	10,303	10,303	—	1,815,301
Kentucky	2,759,408	2,663,842	95,566	17,670	17,010	660	2,777,078
Louisiana	3,698,206	3,651,535	46,671	23,260	23,260	—	3,721,466
Maine	866,106	860,610	5,496	3,372	3,372	—	869,478
Maryland	2,572,550	2,569,077	3,473	13,776	13,776	—	2,586,326
Massachusetts	3,660,114	3,612,585	47,529	17,846	17,846	—	3,677,960
Michigan	9,247,442	9,157,493	89,949	42,215	42,215	—	9,289,657
Minnesota	3,149,073	3,149,073	—	17,733	17,733	—	3,166,806
Mississippi	2,210,754	2,190,876	19,878	14,044	14,044	—	2,224,798
Missouri	3,151,431	3,151,431	—	—	—	—	3,151,431
Montana	727,363	726,878	485	3,849	3,849	—	731,212
Nebraska	1,153,535	1,132,422	21,113	7,077	7,077	—	1,160,612
Nevada	206,190	206,190	—	1,354	1,354	—	207,544
New Hampshire	469,362	469,362	—	5,290	5,290	—	474,652
New Jersey	3,633,979	3,509,613	124,366	—	—	—	3,633,979
New Mexico	882,365	882,365	—	5,447	5,447	—	887,812
New York	8,271,153	8,200,880	70,273	48,574	48,274	300	8,319,727
North Carolina	5,033,116	5,009,049	24,067	26,908	26,908	—	5,060,024
North Dakota	749,047	739,225	9,822	4,236	4,236	—	753,283
Ohio	8,292,146	8,259,340	32,806	48,194	48,194	—	8,340,340
Oklahoma	2,108,077	2,104,216	3,861	—	—	—	2,108,077
Oregon	1,962,736	1,956,664	6,072	8,630	8,630	—	1,971,366
Pennsylvania	8,031,598	8,031,598	—	46,185	46,185	—	8,077,783
Rhode Island	609,008	530,869	78,139	3,278	3,278	—	612,286
South Carolina	2,854,714	2,852,218	2,496	16,610	16,610	—	2,871,324
South Dakota	490,250	490,250	—	3,652	3,652	—	493,902
Tennessee	3,581,807	3,581,807	—	15,889	15,889	—	3,597,696
Texas	9,308,836	9,202,974	105,862	53,786	53,786	—	9,362,622
Utah	1,077,726	1,063,232	14,494	6,508	6,508	—	1,084,234
Vermont	342,615	342,520	95	2,152	2,152	—	344,767
Virginia	3,580,853	3,580,853	—	22,794	22,794	—	3,603,647
Washington	2,225,388	2,225,388	—	12,645	12,645	—	2,238,033
West Virginia	1,848,517	1,848,517	—	9,555	9,555	—	1,858,072
Wisconsin	4,176,381	4,176,381	—	20,016	20,016	—	4,196,397
Wyoming	288,596	288,596	—	840	840	—	289,436
Guam	98,530	98,530	—	—	—	—	98,530
Puerto Rico	1,536,740	1,525,991	10,749	14,780	14,780	—	1,551,520
Virgin Islands	102,136	102,136	—	—	—	—	102,136
Bureau of Indian Affairs	50,201	50,201	—	608	608	—	50,809

Table 12.—National Defense Education Act, Title III, and National Foundation on the Arts and the Humanities Act, Section 12, Expenditures from All Sources and Percent of Total for Each Subject Area, Fiscal Year 1969

State	Science (1)	% (a)	Mathematics (2)	% (b)	History (3)	% (c)	Civics (4)	% (d)	Geography (5)	% (e)	Economics (6)	% (f)
Total	$57,395,532	37.1	$8,768,451	5.7	$12,903,738	8.3	$2,227,981	1.4	$7,160,541	4.6	$1,400,800	0.9
Alabama	1,062,763	28.2	254,365	6.7	505,975	13.4	70,529	1.9	126,329	3.4	12,226	0.3
Alaska	74,304	28.9	5,887	2.3	8,891	3.5	2,129	0.8	4,135	1.6	–0–	0.0
Arizona	532,214	34.0	100,212	6.4	141,174	9.0	8,104	0.5	72,638	4.6	178	0.0
Arkansas	914,744	46.4	139,853	7.1	129,521	6.6	16,852	0.9	52,045	2.5	5,522	0.3
California	4,568,174	42.5	650,772	6.1	325,774	3.0	25,342	0.2	259,122	2.4	60,907	0.4
Colorado	562,852	34.2	224,547	13.6	125,895	7.6	35,328	2.1	81,225	4.9	11,608	0.7
Connecticut	545,656	44.6	73,109	6.0	89,072	7.3	16,381	1.3	100,376	8.2	–0–	0.0
Delaware	151,294	45.7	11,000	3.3	35,000	10.6	–0–	0.0	600	0.2	–0–	0.0
Dist. of Columbia	48,015	14.0	49,892	14.6	–0–	0.0	–0–	0.0	49,730	14.6	–0–	0.0
Florida	1,548,573	26.5	228,736	3.9	491,463	8.4	54,511	0.9	146,841	2.5	5,424	0.1
Georgia	1,211,102	27.1	377,920	8.4	274,162	6.1	257,800	5.7	279,849	6.2	214,249	4.8
Hawaii	119,606	12.2	27,632	2.8	64,515	6.6	14,783	1.5	64,859	6.6	5,898	0.6
Idaho	258,062	36.0	25,059	3.5	72,381	10.1	14,000	2.0	33,774	4.7	–0–	0.0
Illinois	2,530,482	35.8	397,466	5.6	391,960	5.5	223,977	3.2	447,954	6.3	55,994	0.8
Indiana	1,366,255	35.0	57,362	1.5	223,728	5.7	25,893	0.7	104,964	2.7	9,843	0.2
Iowa	767,138	29.1	214,887	8.1	253,070	9.6	50,458	1.9	182,952	6.9	32,398	1.2
Kansas	660,996	36.4	104,167	5.7	103,604	5.7	19,934	1.1	70,161	3.9	14,846	0.8
Kentucky	1,277,629	46.0	173,808	6.3	133,824	4.8	18,222	0.7	81,383	2.9	2,990	0.1
Louisiana	1,875,200	50.4	228,200	6.1	311,088	8.4	26,938	0.7	116,305	3.1	1,872	0.1
Maine	494,659	56.9	30,118	3.5	35,356	4.1	2,134	0.2	25,386	2.9	295	0.0
Maryland	754,762	29.2	253,815	9.8	340,812	13.2	16,787	0.7	181,781	7.0	8,596	0.3
Massachusetts	1,230,800	33.5	293,339	8.0	288,787	7.8	40,604	1.1	196,472	5.3	7,795	0.2
Michigan	3,672,420	39.5	305,327	3.3	697,445	7.5	129,955	1.4	619,274	6.7	92,235	1.0
Minnesota	932,602	29.4	174,312	5.5	360,879	11.4	81,170	2.6	223,058	7.0	20,792	0.7
Mississippi	714,592	32.1	132,611	6.0	208,919	9.4	55,609	2.5	93,215	4.2	24,664	1.1
Missouri	1,110,796	35.3	192,123	6.1	362,669	11.5	89,162	2.8	130,494	4.1	8,928	0.3
Montana	254,845	34.9	35,619	4.9	35,617	4.9	15,368	2.1	30,399	4.2	3,875	0.5
Nebraska	665,895	57.5	49,149	4.1	88,178	7.6	28,504	2.5	59,588	5.1	22,559	2.0
Nevada	150,661	72.6	2,804	1.2	9,482	4.6	333	0.2	11,536	5.6	–0–	0.0
New Hampshire	325,136	68.5	27,377	5.8	22,457	4.7	942	0.2	6,208	1.3	219	0.0
New Jersey	1,738,651	47.8	179,285	4.9	368,942	10.2	23,699	0.7	168,678	4.6	11,647	0.3
New Mexico	317,263	35.7	21,845	2.5	99,009	11.2	15,323	1.7	30,629	3.5	3,859	0.4
New York	2,318,530	27.9	591,932	7.1	967,981	11.6	89,448	1.1	124,904	1.5	502,301	6.0
North Carolina	2,034,610	40.2	185,269	3.7	743,350	14.7	63,811	1.3	276,754	5.5	7,588	0.1
North Dakota	349,521	46.4	36,508	4.8	57,501	7.6	18,218	2.4	50,608	6.7	8,294	1.1
Ohio	1,965,239	23.6	514,113	6.2	854,091	10.2	116,090	1.4	232,180	2.8	74,629	0.9
Oklahoma	574,260	27.2	143,749	6.8	190,610	9.0	33,829	1.6	97,753	4.6	16,629	0.8
Oregon	537,125	27.3	55,722	2.8	216,625	11.0	88,345	4.5	230,047	11.7	59,506	3.0
Pennsylvania	4,475,768	55.4	469,139	5.8	557,833	6.9	33,749	0.4	337,309	4.2	5,541	0.1
Rhode Island	278,561	45.5	51,301	8.4	21,274	3.5	1,156	0.2	12,770	2.1	1,645	0.3
South Carolina	1,260,970	43.9	154,606	5.4	281,095	9.8	23,000	0.8	159,572	5.6	1,082	0.0
South Dakota	279,047	56.5	2,828	0.6	53,234	10.8	349	0.1	1,299	0.3	21	0.0
Tennessee	1,418,495	39.4	221,933	6.2	324,717	9.0	24,233	0.7	214,119	6.0	4,440	0.1
Texas	3,854,148	41.2	448,574	4.8	584,518	6.2	99,000	1.1	375,362	4.0	28,356	0.3
Utah	510,513	47.1	37,951	3.5	108,670	10.0	15,747	1.5	50,588	4.7	2,414	0.2
Vermont	100,461	29.1	13,243	3.8	22,217	6.4	11,964	3.5	28,142	8.2	–0–	0.0
Virginia	1,438,835	39.9	160,564	4.5	335,912	9.3	30,058	0.8	205,955	5.7	–0–	0.0
Washington	601,675	26.9	112,461	5.0	341,081	15.2	53,578	2.4	255,805	11.4	36,811	1.5
West Virginia	548,592	29.5	198,378	10.7	175,311	9.4	19,906	1.1	132,021	7.1	1,945	0.1
Wisconsin	1,520,230	36.2	212,187	5.1	343,363	8.2	113,516	2.7	266,680	6.3	29,623	0.7
Wyoming	135,743	46.9	9,643	3.3	16,851	5.8	634	0.2	15,721	5.4	556	0.2
Guam	23,671	24.0	–0–	0.0	18,750	19.0	–0–	0.0	–0–	0.0	–0–	0.0
Puerto Rico	699,587	45.1	60,462	3.9	84,111	5.4	9,169	0.6	38,071	2.4	–0–	0.0
Virgin Islands	13,408	13.1	22,068	21.6	852	0.8	–0–	0.0	–0–	0.0	–0–	0.0
Bureau of Indian Affairs	18,402	36.2	23,231	45.7	4,142	8.2	1,410	2.8	2,921	5.7	–0–	0.0

Table 12.—National Defense Education Act, Title III, and National Foundation on the Arts and the Humanities Act, Section 12, Expenditures from All Sources and Percent of Total for Each Subject Area, Fiscal Year 1969—Continued

State	Modern Foreign Languages (7)	% (g)	English (8)	% (h)	Reading (9)	% (i)	Industrial Arts (10)	% (j)	Arts and Humanities (11)	% (k)	Total (12)
Total	$8,381,012	5.4	$13,277,257	8.6	$22,670,248	14.6	$19,833,294	12.8	$862,722	0.6	$154,881,576
Alabama	118,258	3.1	467,572	12.4	1,070,000	28.3	66,335	1.7	21,844	0.6	3,776,196
Alaska	1,342	0.5	10,621	4.1	149,775	58.3	–0–	0.0	–0–	0.0	257,084
Arizona	18,521	1.2	56,549	3.6	507,624	32.4	121,766	7.8	8,279	0.5	1,567,259
Arkansas	106,988	5.4	198,089	10.1	407,169	20.7	–0–	0.0	–0–	0.0	1,970,783
California	978,623	9.1	606,793	5.7	1,808,420	16.8	1,414,372	13.2	68,071	0.6	10,746,370
Colorado	131,624	8.0	159,972	9.7	191,883	11.7	114,175	6.9	9,340	0.6	1,648,443
Connecticut	76,967	6.3	88,557	7.3	197,526	16.2	27,033	2 2	7,623	0.6	1,222,300
Delaware	22,000	6.6	12,200	3.7	–0–	0.0	97,000	29.3	1,914	0.6	331,008
Dist. of Columbia	49,701	14.5	50,333	14.7	41,800	12.2	50,436	14.8	2,050	0.6	341,957
Florida	189,073	3.2	446,979	7.6	2,354,166	40.1	342,583	5.8	58,097	1.0	5,866,446
Georgia	455,004	10.2	311,361	7.0	415,227	9.3	654,652	14.6	24,888	0.6	4,476,214
Hawaii	8,792	0.9	131,864	13.5	505,537	51.6	19,334	2.0	16,571	1.7	979,391
Idaho	23,652	3.3	40,788	5.7	140,838	19.7	103,582	14.4	4,144	0.6	716,280
Illinois	368,534	5.2	543,985	7.7	815,977	11.5	1,245,118	17.6	57,276	0.8	7,078,723
Indiana	163,822	4.2	145,084	3.7	565,601	14.5	1,216,278	31.2	22,568	0.6	3,901,398
Iowa	68,238	2.3	205,086	7.8	342,540	13.0	511,855	19.4	10,987	0.4	2,639,609
Kansas	90,612	5.0	86,577	4.8	245,374	13.5	408,727	22.5	10,303	0.6	1,815,301
Kentucky	128,078	4.6	211,626	7.6	504,124	18.2	227,719	8.2	17,670	0.6	2,777,078
Louisiana	162,227	4.5	164,342	4.4	354,541	9.5	457,493	12.3	23,260	0.6	3,721,466
Maine	45,774	5.3	38,372	4.4	77,138	8.9	116,874	13.4	3,372	0.4	869,478
Maryland	249,481	9.8	259,449	10.0	356,019	13.9	151,047	5.9	13,776	0.5	2,586,325
Massachusetts	510,060	13.9	191,181	5.2	438,158	11.9	462,918	12.6	17,846	0.5	3,677,960
Michigan	447,476	4.8	583,906	6.3	929,517	10.0	1,769,887	19.0	42,215	0.5	9,289,657
Minnesota	190,985	6.0	286,882	9.1	234,528	7.4	643,865	20.3	17,733	0.6	3,166,806
Mississippi	54,598	2.4	287,216	12.9	371,063	16.7	268,267	12.1	14,044	0.6	2,224,798
Missouri	128,569	4.1	332,665	10.6	429,183	13.6	366,841	11.6	–0–	0.0	3,151,430
Montana	24,233	3.3	43,163	5.9	99,729	13.6	184,517	25.2	3,843	0.5	731,206
Nebraska	59,921	5.2	71,923	6.1	57,234	4.9	50,584	4.4	7,077	0.6	1,160,612
Nevada	530	0.3	3,615	1.7	18,841	9.1	8,388	4.0	1,354	0.7	207,544
New Hampshire	56,173	11.9	5,688	1.2	25,162	5.3	–0–	0.0	5,290	1.1	474,652
New Jersey	216,401	6.0	251,163	6.9	333,054	9.2	342,460	9.4	–0–	0.0	3,633,980
New Mexico	23,988	2.7	82,588	9.3	241,258	27.2	46,603	5.2	5,447	0.6	887,812
New York	559,975	6.8	951,412	11.4	851,080	10.2	1,313,590	15.8	48,574	0.6	8,319,727
North Carolina	168,389	3.3	457,419	9.0	888,397	17.6	207,530	4.1	26,908	0.5	5,060,027
North Dakota	36,202	4.8	49,495	6.6	64,516	8.6	78,184	10.4	4,236	0.6	753,285
Ohio	223,888	2.6	1,459,418	17.5	1,152,608	13.8	1,699,890	20.4	48,194	0.6	8,340,340
Oklahoma	106,572	5.1	261,493	12.4	515,414	24.5	167,766	8.0	–0–	0.0	2,108,075
Oregon	49,198	2.5	175,425	8.9	179,824	9.1	370,919	18.8	8,630	0.4	1,971,366
Pennsylvania	405,065	5.0	405,029	5.0	574,860	7.1	767,305	9.5	46,185	0.6	8,077,783
Rhode Island	82,034	13.4	62,770	10.2	34,214	5.6	63,283	10.3	3,278	0.5	612,286
South Carolina	90,193	3.1	260,738	9.1	510,755	17.8	112,703	3.9	16,610	0.6	2,871,324
South Dakota	9,229	1.9	27,224	5.5	10,573	2.0	106,445	21.6	3,652	0.7	493,901
Tennessee	135,174	3.8	348,238	9.7	584,361	16.2	306,096	8.5	15,889	0.4	3,597,695
Texas	705,734	7.5	951,804	10.2	1,416,868	15.1	844,472	9.0	53,786	0.6	9,362,622
Utah	25,332	2.2	99,541	9.2	107,024	9.9	119,946	11.1	6,508	0.6	1,084,234
Vermont	7,248	2.1	23,007	6.7	47,846	13.9	88,487	25.7	2,152	0.6	344,767
Virginia	164,815	4.6	471,867	13.1	262,679	7.3	510,167	14.2	22,794	0.6	3,603,646
Washington	105,404	4.7	209,001	9.3	291,766	13.3	217,806	9.7	12,645	0.6	2,238,033
West Virginia	43,165	2.3	220,211	11.9	376,936	20.3	132,052	7.1	9,555	0.5	1,858,072
Wisconsin	254,258	6.1	381,564	9.1	385,859	9.2	669,102	15.9	20,016	0.5	4,196,398
Wyoming	4,169	1.5	30,480	10.5	29,115	10.1	45,684	15.8	840	0.3	289,436
Guam	19,387	19.7	11,772	12.0	24,950	25.3	–0–	0.0	–0–	0.0	98,530
Puerto Rico	5,962	0.4	37,703	2.4	93,379	6.0	508,296	32.8	14,780	1.0	1,551,520
Virgin Islands	9,374	9.2	5,457	5.3	38,118	37.3	12,862	12.7	–0–	0.0	102,136
Bureau of Indian Affairs	–0–	0.0	–0–	0.0	95	0.2	–0–	0.0	608	1.2	50,809

Table 13.—National Defense Education Act, Title III, and National Foundation on the Arts and the Humanities Act, Section 12, Ranking of States by Percentage of Total Amount Spent for Subject Areas, Fiscal Year 1969

State	Science	Mathematics	History	Civics	Geography	Economics	Modern Foreign Languages	English	Reading	Industrial Arts	Arts and Humanities
Total	(49)	(48)	(48)	(46)	(48)	(38)	(48)	(48)	(48)	(44)	(44)
Alabama	40	12	4	16	34	18	35	7	4	44	20
Alaska	39	45	47	30	44	—[1]	46	42	1*	35	—[1]
Arizona	31	13	21	38	27	37	44	45	3	—[1]	34
Arkansas	9	10	32	28	40	21	15	15	7	—[1]	—[1]
California	17	19	48	41	42	16	8	35	3	22	9
Colorado											
Connecticut	15	20	29	21	4	—[1]	12	27	6	42	14
Delaware	12	41	11	—[1]	48	—[1]	11	44	—[1]	3	22
Dist. of Columbia	48	2	—[1]	—[1]	1*	—[1]	2	2	28	17	16
Georgia	44	5	35	1*	15	2	6	28	34	18	30
Hawaii	49	44	31	18	12	14	45	3	2	43	1*
Idaho	26	38	13	14	25	—	33	34	9	19	18
Illinois	27	25	39	4	14	10	17	25	29	13	5
Indiana	29	46	37	34	39	23	28	24	18	2	21
Iowa	38	7	15	15	9	6	39	43	26	10	42
Kansas	23	24	38	24	33	9	21	39	24	6	26
Kentucky	11	14	42	35	37	30	25	26	10	33	8
Louisiana	7	17	22	32	35	33	27	40	33	24	12
Maine	4	39	45	40	36	36	16	41	38	21	43
Maryland	36	4	5	36	8	17	7	16	20	37	31
Massachusetts	32	8	25	23	23	24	3	37	27	23	37
Michigan	21	42	28	19	11	27	22	30	32	11	39
Minnesota	35	26	8	8	7	13	14	21	40	9	29
Mississippi	33	21	17	9	29	25	38	5	14	25	11
Missouri	28	18	7	5	31	20	29	11	23	26	—[1]
Montana	30	30	41	13	30	15	32	33	22	5	35
Nebraska	3	34	27	10	24	4	18	31	46	38	15
Nevada	1*	47	44	45	19	—[1]	48	47	37	40	7
New Hampshire	2	23	43	43	46	34	5	48	45	—[1]	3
New Jersey											
New Mexico											
New York	41	9	6	25	45	1*	10	10	30	15	17
North Carolina	19	37	3	22	21	28	31	22	12	39	32
North Dakota	10	31	26	11	10	7	23	32	39	27	28
Ohio	47	16	12	20	38	8	36	1*	21	8	23
Oklahoma	43	11	19	17	26	11	19	6	6	34	—[1]
Oregon	42	43	9	2	2	3	37	23	36	12	41
Pennsylvania	6	22	30	39	28	32	20	38	42	30	25
Rhode Island	13	6	46	44	43	22	4	13	44	28	33
South Carolina	16	27	14	31	20	35	34	20	11	41	19
South Dakota	5	48	10	46	47	38	42	36	47	7	6
Tennessee	22	15	20	27	16	29	30	17	15	32	40
Texas	18	32	34	33	32	19	9	14	17	31	24
Utah											
Vermont	37	36	33	3	5	—[1]	41	29	19	4	13
Virginia	20	33	18	29	18	—[1]	26	4	41	20	10
Washington	45	29	2	12	3	5	24	18	25	29	27
West Virginia	34	3	16	26	6	31	40	9	8	36	36
Wisconsin	24	28	23	7	13	12	13	19	35	14	38
Wyoming	8	40	36	42	22	26	43	12	31	16	44
American Samoa											
Guam	46	—[1]	1*	—[1]	—[1]	—[1]	1*	8	5	—[1]	—[1]
Puerto Rico											
Virgin Islands	14	35	40	37	41	—[1]	47	46	43	1*	4
Bureau of Indian Affairs	25	1*	24	6	17	—[1]	—[1]	—[1]	48	—[1]	2

* Highest in Each Category.

[1] No funds expended. All States in this category ranked below last number shown. (as of March 15, 1970)